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The further you go into rehabilitation work, the faster the returns accelerate. Do as complete a job as is economically sound and you'll get the best results. Then do a professional job of management so that the property doesn't slip back into its old condition.

REHABILITATION— NEW FRONTIER FOR PROFESSIONAL MANAGEMENT

by R. Gordon Tarr, CPM

THE RESTORATION of neglected and obsolete properties to usefulness has proved to be a profitable business venture and one in which competition is low and opportunity unlimited, even under rent control. During the past few years our firm has put a good deal of emphasis on a program of rehabilitation of properties under our management. At the same time we have been promoting new management, sales and supervision through our efforts along these lines.

Many of the properties under our management are located in an area known as the West End of Cincinnati. Approximately 75 per cent of the residential units in this area are occupied by Negroes and the structures are from 50 to 100 years old. Not too long ago the first families of the city resided in these same properties. For example, one property under our management was the Cincinnati residence of President Rutherford B. Hayes, while he was practicing law. In general, through poor enforcement of the building code requirements during the depression of the Thirties, poor economic conditions of the occupants, scarcity of housing since the depression and through controlled rentals, this entire area has become blighted. Neglect, absentee ownership, "milker-ownership," and lack of professional management, as we know it today, have taken their toll. Some properties are so badly deteriorated that their restoration is no longer economically sound. Most of them, however, are still structurally sound and offer very real opportunities for rehabilitation.

Building codes in most American cities have not been revised for many years. Until 1951, for example, Cincinnati was using a code developed in 1924. The old code, despite its age, had sufficient teeth to make enforcement possible. However, the depression of the early Thirties brought with it a doubling up of occupants, vacancies and losses from gross possible collections as high as 25 to 30 per cent. Unemployment and lack of returns to the owners had considerable influence on the public officials charged with the job of enforcement. Only in the most extreme cases of neglect were properties ordered condemned. In the Fall of 1951,

MR. TARR *is associated with the Cincinnati firm of Walter H. Tarr and Son, an Accredited Management Organization. He is chairman of the Research Division of the Institute of Real Estate Management.*

a revision of the Cincinnati building code was brought about. Representatives from the Cincinnati Real Estate Board, Home Builders Association and the local Chapter of the Institute of Real Estate Management, spent many hours working out a realistic and workable code revision.

Under this new code, owners are required to provide private sink facilities for each dwelling unit (within the unit). The major step forward was the provision that by January 1, 1956, all outside toilets must be eliminated and adequate inside private toilets for each rental unit must be provided. In addition, our local Chapter of IREM and the Cincinnati Board supported an increased budget for the Building Department which would allow for adequate additional inspectors to police the major blighted areas. No matter how much new housing you add, or how much you rehabilitate the existing structures, unless a very close check is kept on the existing areas, the blight will spread and deterioration will work faster than the improvements can be made. Rehabilitation is not a hit-and-miss affair, but a continuous process. We feel fortunate in Cincinnati that we have capable men at the helm, who know the problems and are doing their best to keep buildings safe and sanitary and are working in every way possible to bring about improvements consistent with the age and conditions of the structures. The full cooperation of the city officials greatly facilitates successful rehabilitation work.

We started our own small program of rehabilitation several years ago. Each building was given a thorough inspection to determine how and to what extent modernization would be practical. However, one need not be in the management business to get started on rehabilitation work. There are plenty of opportunities to start from scratch. Promotion of sales, insurance, loans and management can all benefit from your efforts toward rehabilitation.

MAKE A SURVEY

Start with a study of a blighted area which lends itself to improvement. Search out rundown properties which are structurally sound. Make a thorough inspection of the individual property and note all items of repair which appear necessary and decide how the property can best be modernized. Keep in mind while making this survey that there are economic limits to rehabilitation. Some areas will justify installation of toilets and bathrooms, as the rehabilitated rentals will be adequate to write off improvements in a reasonable time. In other areas, it is economically sound to install only toilets. We usually plan with a plumber where these new private facilities can be properly installed. In some cases windows can be cut or partitions built to house the new facilities. Generally, we find that fire escapes are in need of a thorough repair job. Where large apartments have been cut up, the escapes no longer serve their purpose. Extension of present balconies or the addition of new balconies often will bring the building into compliance with the code. Again, rearrangement of the rooms may make only a repair job necessary.

We generally talk over the proposed changes with the officials of the Building Department and Plan Commission of the city to be sure that some public improvement is not to be located on or through the property. Generally, these public improvements are known by the Plan Commission and a "Mapped Street Line" is on record. As a rule, most of these public projects (parks, schools, etc.) involve a long period between the drawing board and actual con-

[CONTINUED ON PAGE 203]

REHABILITATION CASE HISTORIES

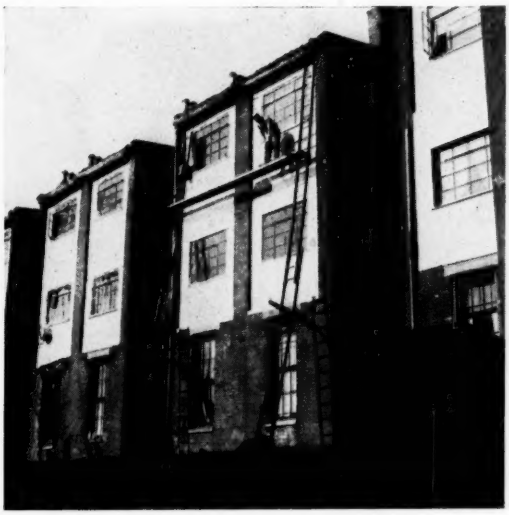
UNDERTAKEN BY WALTER H. TARR & SON, A.M.O.

Account No. (Identification)	*Number of Apartment Units "Before"*	*Number of Apartment Units "After"*	*Total Cost of Rehabilitation Work*	*Total Monthly Rent "Before"*	*Total Monthly Rent "After"*	*Increase Per Month Allowed*	*Increase Per Year Allowed*	*Gross Return on Expenditures*	*Number of Years to Write off Cost*
103-555-565	18	18	$2,902.61	$248.40	$297.40	$48.60	$583.20	20.09%	4.97 yrs.
103-555-565	18	18	2,402.57	297.00	354.00	57.00	684.00	28.469%	3.51 yrs.
103-616-626	3 Stores & 15 Apt.	3 Stores & 15 Apt.	2,849.50	417.70	460.00	42.30	507.60	17.81%	5.61 yrs.
214-522	3	2	771.33	48.30	64.50	16.20	194.40	25.20%	3.96 yrs.
311-747	10	5	4,113.28	85.00	131.00	46.00	552.00	13.41%	7.45 yrs.
311-757	6	3	4,522.85	81.00	115.00	34.00	408.00	9.02%	11.08 yrs.
349-715	7	6	1,892.22	77.70	94.60	16.90	202.80	10.717%	9.33 yrs.
306-38-40	4	4	1,185.31	48.60	72.00	23.40	280.80	23.69%	4.22 yrs.
220-771-773	6	6	3,705.99	120.00	168.00	48.00	576.00	15.542%	6.434 yrs.
207-412	2	2	1,503.31	20.00	50.00	30.00	360.00	23.947%	4.175 yrs.
301-519-521	Store & 9 Apts.	Store & 7 Apts.	1,355.38	255.95	277.00	21.05	252.60	18.64%	5.365 yrs.
223-608-610	13	12	2,414.74	145.00	207.80	62.80	753.60	31.208%	3.20 yrs.
421-1546-48	4	4	561.37	60.95	76.00	15.05	180.60	32.17%	3.108 yrs.
311-1013	Store & 8 Apts.	Store & 4 Apts.	6,495.42	88.00	150.00	62.00	744.00	11.45%	8.73 yrs.
Compensated by insurance (fire)			3,600.00						
			2,895.42	88.00	150.00	62.00	744.00	25.70%	3.89 yrs.

BEFORE

Row of six 3-family units with outmoded bay windows. Project 103-555-565

AFTER

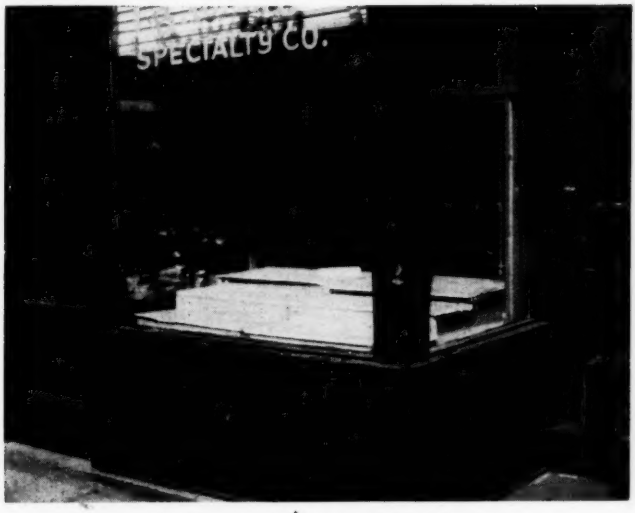


Bay windows were torn off, metal sash installed and asbestos siding applied.

BEFORE

Typical deterioration of old store fronts, which were torn out and replaced. (Project 103-616-626)

AFTER



Replacement of fronts using same glass with new wood which was treated with Woodlife, and exterior masonite.

BREAKDOWN OF EXPENDITURES—REHABILITATION

WALTER H. TARR & SON, A.M.O., CINCINNATI 3, OHIO

Type of Work Done	*103-555-565*	*103-555-565*	*103-616-26*	*214-522*	*311-747*	*311-757*	*349-715*
PLUMBING (Inc. partitions and sink installations)	—	$2,402.57	—	$771.33	$2,032.61	$1,909.77	$54.31
PLASTERING—BRICK *and* CEMENT WORK	$ 139.30	—	—	—	203.71	911.52	290.15
CARPENTRY (windows, doors, floors, stairs, etc.)	—	—	$1,372.80	—	204.22	416.72	341.57
ROOFING—GUTTERS—SPOUTING	—	—	—	—	251.82	—	139.70
ELECTRIC WIRING	—	—	41.70	—	722.70	551.65	73.13
INSTALLATION OF GAS SERVICE	—	—	—	—	65.37	35.22	—
FIRE ESCAPES—IRON DOORS, *etc.*	—	—	654.50	—	121.00	—	525.00
PAINTING *and* DECORATING (Interior & Exterior)	—	—	780.50	—	256.90	410.07	468.36
HAULING RUBBISH & DEBRIS	—	—	—	—	28.00	34.50	—
MISCELLANEOUS (Bldg. Permits)	—	—	—	—	226.95	253.40	—
REPLACING BAY WINDOWS *and* SIDING	2,763.31	—	—	—	—	—	—
TOTAL EXPENDITURES	$2,902.61	$2,402.57	$2,849.50	$771.33	$4,113.28	$4,522.85	$1,892.22

BREAKDOWN OF EXPENDITURES—REHABILITATION

WALTER H. TARR & SON, A.M.O., CINCINNATI 3, OHIO

Type of Work Done	*306-38-40*	*220-771-773*	*207-412*	*301-519-521*	*223-608-610*	*421-1546-1548*	*311-1013*
PLUMBING (Inc. partitions and sink installations)	$269.41	$3,237.09	$644.66	$1,355.38	$275.42	—	$2,394.32
PLASTERING—BRICK *and* CEMENT WORK	296.31	186.09	155.02	—	820.90	—	2,184.00
CARPENTRY (windows, doors, floors, stairs, etc.)	385.29	226.81	196.40	—	382.04	—	
ROOFING—GUTTERS—SPOUTING	234.30	—	224.63	—	352.00	—	482.00
ELECTRIC WIRING	—	51.00	9.94	—	—	—	627.00
INSTALLATION OF GAS SERVICE	—	—	—	—	—	—	267.70
FIRE ESCAPES—IRON DOORS, *etc.*	—	—	—	—	132.00	561.37	210.00
PAINTING *and* DECORATING (Interior & Exterior)	—	—	272.66	—	452.38	—	300.00
HAULING RUBBISH & DEBRIS	—	—	—	—	—	—	15.40
MISCELLANEOUS (Bldg. Permits)	—	5.00	—	—	—	—	15.00
REPLACING BAY WINDOWS *and* SIDING	—	—	—	—	—	—	—
TOTAL EXPENDITURES	$1,185.31	$3,705.99	$1,503.31	$1,355.38	$2,414.74	$561.37	$6,495.42

BEFORE

Three yard toilets served nine families, only one in operation. It was stopped and floor was sunken 18 inches below grade (Project 311-747)

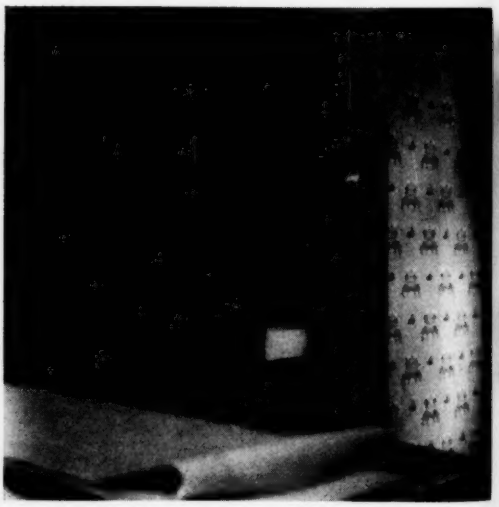
AFTER

New, private toilets inside each unit. Yard toilets were removed and yard cemented. Family units reduced to five.

BEFORE

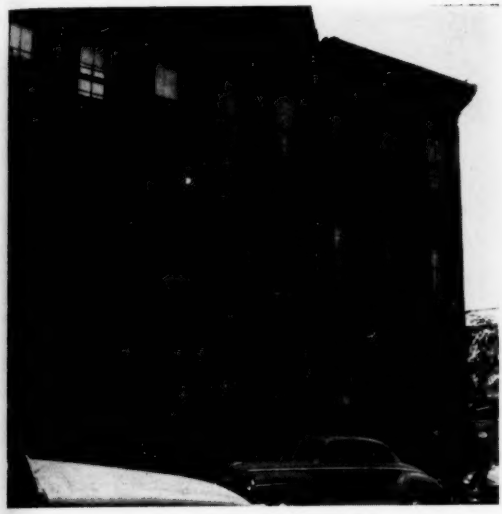
This is one of four sinks which supplied nine families. Rusty, black iron, with lead water supply which leaked into bucket

AFTER



All sinks were removed from hall and new ones installed in each unit with copper supply and drainboard.

BEFORE

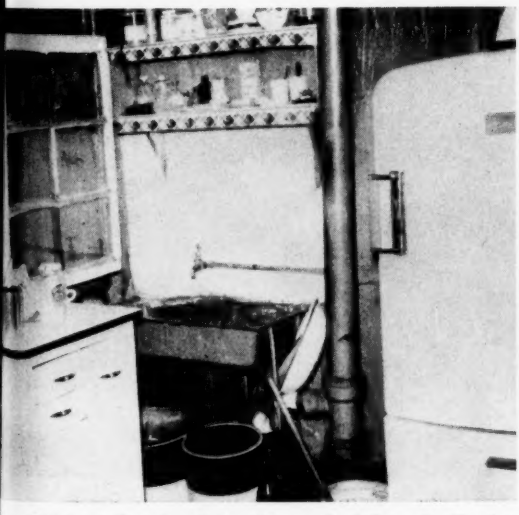


This property was completely overhauled and rehabilitated. (Project 349-715)

AFTER

Exterior was painted and a fire escape added. Cost of work was $1,892; rent was increased $16.90 per month

BEFORE



Old iron flat-rim sink without drainboard. (Project 306-38-40)

AFTER

New white enamel sink was installed.

BEFORE

Original condition of rear stairway to yard. (Project 421-1546-48)

AFTER

Old porch was removed and a new metal porch with one stairway to yard was installed. (Picture was taken before weatherboard was repaired and painted)

BEFORE

Bad crack in corner, which was supported by a wooden sill, was corrected by tearing down and rebuilding. (Project 306-422)

AFTER

Wooden sills were replaced with "I" beams as lintels and wall rebuilt. Cost, $450.

struction; thus rehabilitation can be done and its cost written off long before such a project is ready to go. In our experience, most can be written off in about five or six years. The property is just that much more valuable to the owner and in the meantime the occupants have had the benefits of safe, decent and sanitary housing, at no expense to the taxpayer.

Before we go too far in our survey and planning we contact the owner and try to negotiate a selling agency agreement. If the owner is not receptive to selling, we then propose that he give us a management agreement on the basis of the rehabilitation program we have outlined. We try to show him how modernization and repairs will bring him increased revenue which will more than justify both cost and our management fee. In this way, we have not wasted our time making the survey. When he talks about a particular part of the property, we have an intimate knowledge of what he means, its condition and how we plan to remedy it.

TAKE PICTURES

Back up your sales promotion with before-and-after pictures from other jobs. You'll be surprised how effective these pictures can be and how it eases the sales job. We generally take a few pictures when we make our inspection. Some owners haven't seen their property for years and don't realize the deplorable condition it is in. Most any type of camera with a flash attachment will do the job. However, we recommend the use of a Polaroid Land Camera because it gives you a picture within a minute after it is taken. With a Land camera we know that we have a picture before we leave the property. Most localities have commercial photographers who will do the job reasonably if you feel that you don't want to do it yourself.

As we go along we get as many estimates of cost as we can. After you do a few of these jobs you begin to get a fairly good idea of what it will cost to rehabilitate a particular property. With cost of improvements in mind, you can judge better what price an investor can afford to pay for the property. Every broker has a prospect list which can be dusted off and put to work. You may find that you want to take an interest in some of the property yourself, as a partner. By so doing you can be certain of the management and at the same time this shows your prospect that you are sincere in your conviction that the proposal is economically sound.

FINANCING

Financing of rehabilitation work often presents a stumbling block. Many financial institutions are hesitant to lend money on property which is located in blighted areas. Many local Building and Loan Associations have a set policy that they will not lend funds on properties in these areas due to the fact that they had troubles and foreclosures in the depression of the Thirties. However, if you will look over the records you'll find that very few lost any sizable amount, even where they had to foreclose. As agent for several banks and building associations, our firm took over the management of several properties which were foreclosed, and in every instance the unpaid balance was paid out from income, and properties were later sold at quite a nice profit.

Associations can be found which will make these loans. Those with whom we are acquainted usually specify that the loan will be granted provided our firm has the management of the property. A management agreement is drawn which binds the borrower to engage our firm to manage the property as long as the loan remains unpaid.

Interest is usually a little higher (5½ per cent to 6.24 per cent) than that charged on newer construction. In several cases a loan was granted for the original purchase of the unimproved property and at the same time a commitment was given for the amount of the improvements, to be paid out as the work was completed. When buyer and seller are in agreement as to price, we usually make a personal call on the Board of the Building and Loan Association to present the application. Here again, the before-and-after pictures of other similar projects count heavily.

We haven't had to go into the securing of FHA loans for these improvements under the Title I program. But as you will note from discussions before the Currency and Banking Committee, Commissioner Walter L. Greene has stated that extending these loans from three years and 32 days to five years would bring financing within the reach of many who need this financing and can't now afford it.

In cases where the rehabilitation work is of a relatively minor nature and properties are under our management, we can often get the owners to forego any income for enough months to take care of the needed improvements. There are, however, many cases where the owners are little better off financially than some of the occupants of their run-down property. Through lack of good management, much necessary maintenance work has been deferred year after year. With each extension of rent control the owners put off the needed work. Here again, professional management can do a job.

We set up what we call "budget management" under which we estimate and set aside from current income funds to meet all estimated expenses, including those for maintenance and repairs, interest and principal, insurance, taxes, etc. The owner receives a regular check each month for an amount which we estimate will be one-twelfth of the final net income before depreciation. This arrangement gives the owner an uninterrupted flow of income—quite desirable for widows, retired individuals and the like, who depend upon their property for their livelihood. The balance not actually spent is shown on the statement each month and allows us to schedule repairs, painting and replacements in an orderly manner, without calling upon the owner for added funds, unless, of course, a rehabilitation job is in order. Often refinancing of a present loan will supply the needed funds for improvements, and makes the loan just that much more desirable, from the lender's viewpoint.

YOUR BUSINESS WILL INCREASE

Brokers who take up rehabilitation work will find that sales will increase, new management is added to their portfolio and new insurance can be written. In addition, properly drawn management agreements will include supervising fees.

In all our management agreements we provide a special clause with reference to our charges for repair work. We keep a small crew of maintenance men on our payroll who work under a maintenance supervisor. We specify in our management agreement that owners are to be charged 10 per cent over actual cost on all materials and 20 per cent on our actual cost of labor. Further, on work which is contracted, and on which we write up specifications and get bids, we specify that the owner is to be charged 10 per cent of the contract price for our supervision. This results in better work and assures owners that they get what the contract calls for.

Our profit on this supervision charge is not much, when you consider that from this

source we must pay our maintenance supervisor, payroll taxes, industrial insurance, contractors liability insurance, etc.; but it adds to our income and permits prompt and better service to our clients.

In the foregoing tables I have accumulated a case history record of some of the rehabilitation projects which we have undertaken during the past year or so. You'll note that in most instances the cost of these improvements and rehabilitation will be written off in slightly over 5 years, even under controlled rentals. We have found that turnover of occupants is less, and the tenants generally seem to appreciate the improvements and take better care of the property. They have a new pride in their homes and often get entirely new furnishings. Our public relations with tenants has vastly improved, and we have gained continuing management accounts through rehabilitation work.

The pictures reproduced here help to visualize some of the improvements. The numbers under the pictures refer to the account numbers on the table of case histories. Also included in table form are the cost figures on a few of these jobs.

A letter to the Journal's *editor from George Reavell of Essex, England. Mr. Reavell is a fellow of the Royal Institution of Chartered Surveyors, and last reported on the real estate market in his country in the* Journal *of two years ago—Spring 1951.*

HOW'S BUSINESS IN ENGLAND?

REAL ESTATE investments are still a very good thing, and good stuff is hard to buy at current prices, which are down, thus keeping step with Government stock. Free-hold shops are slightly worse than paralleled with Government stock because of (a) trade recession generally, and (b) many shops are let at high immediate post-war rents.

Government stocks show 5 per cent. Freehold ground rents 5½ percent. Freehold shops which should show 6 per cent are nearer 7 per cent. Modern blocks of flats are not so popular as they were, and can be bought Freehold to show 7 to 7½ per cent. Small houses let on inclusive rentals have gone further out, because of still increasing repair costs. Interest is only kept alive by consideration that rent increases will have to be permitted sooner or later.

The general tendancy of buyers is downward, but most present owners are keeping out of the market, in the belief that the efforts of the present Government to restore the internal value of the pound will fail, and that inflation will go up again.

Mortgages are terrible. There just is not any money on offer. When there is, the rate is 5 to 6 per cent. Cause of all that is, that by Government order, banks must not lend for investment. Thus many people with bank loans or real estate are being pushed by their bankers to get their money elsewhere. Other money sources are not keen on lending—they would rather buy.

Shortage of money is, of course, affecting the real estate investment market to a certain extent. Vacant possession houses are easier. These are down 1 to 15 per cent, and property takes much longer to sell. Reasons: (1) Shortage of money is causing people to sell to raise cash; (2) Profit taking—though I cannot see anything in that—one has to live somewhere; (3) Shortage of mortgage money; (4) General idea held by the man in the street that, with the new Government issuing private house building licences far more freely than did the Socialists, lots of cheap new houses are just round the corner! The facts of that one are that materials are still very short; we have too few dollars to import enough timber for large housing projects; and the cost to build a dwelling house today is 3/-d. per cubic foot, as against eleven-pence halfpenny before the war. Where the cheap houses are to come from is beyond me.

Just two and one-half years ago, in the Winter 1951 issue of the Journal, we prepared a manuscript on the subject "X-Ray of Management Operations." The article was based upon a questionnaire which had been mailed to all members of the Institute asking for certain basic data on the policies and practices followed in their respective offices. Having thus established a bench mark for future measurement of trends, it now becomes possible for us to look back and see just what has happened to these management policies and practices in the intervening period. It is our hope that individual CPMs may find this article of value in comparing their own recent experience with that reported by a broad segment of the profession.

LATEST X-RAY OF MANAGEMENT OPERATIONS

by James C. Downs, Jr., CPM, S.C.D.

QUESTIONNAIRES used as the basis for the current survey of management practices were mailed to all CPMs in the U.S. The response from this mailing was 12 per cent and included the reports of 140 members embracing 34 states and 91 cities in the U.S.

For tabulating purposes, the country was divided into three sections. The East was considered to be all of that territory lying east of the Mississippi River and north of the Mason-Dixon line. The South was the territory below the Mason-Dixon line and the West was considered to be the rest of the United States lying north of the Mason-Dixon line and west of the Mississippi River.

Our examination of the questionnaires leads us to believe that the survey is truly representative and that the results may be said to state fairly the experience of the profession as a whole in those matters on which reports were solicited.

JAMES C. DOWNS, JR., *a national authority in real estate, its management and its economics, is president of Real Estate Research Corporation and partner of Downs, Mohl & Company, Chicago firms.*

SALARY RANGE OF STENOGRAPHIC HELP

In the 1951 article we reported that the range of stenographers' wages varied substantially from small to large cities and from section to section of the country. This same deviation, based upon the size of the community and its location, still prevails.

As might be expected in the light of recent wage trends, there has been a substantial increase in stenographic wages—especially in starting wages. In 1951 the lowest rate of compensation reported for stenographers was $150 per month and the highest rate of pay was $300 per month. In the current survey a smaller percentage of

stenographers was found to be paid at rates below $200 per month. The average wage has moved up from the range of $200 to $225 per month to the range between $250 and $300 per month. While the top wage paid in 1951 was reported at $300, we now find that 20 per cent reported a top wage for stenographers at $300 per month and over, with the highest wage having moved to $450 per month. The latter salary was reported by a Chicago firm.

In both the East and West sections of the country, the most frequent rate of pay for stenographers was in the $250 to $300 per month bracket. In the South the most frequent rate was still in the $200 to $225 per month bracket.

From the point of view of vacation granted, the situation has not changed much since 1951 although there is a definite trend toward longer vacation periods both in and out of the stenographic field. The standard vacation period in CPM offices is still two weeks, with an overwhelming percentage granting vacations of that length. An increasing percentage of firms, however, offer additional vacation periods over two weeks based upon length of service and employment. Only one firm in the country extends vacation time to one month on such longevity of service.

Although it seems extraordinary that the members of a management profession should be without definite policy in the field of management of their own businesses, this nonetheless appears to be true. In more than 60 per cent of the offices there is apparently no employee manual or any stated policy with respect to sick leave for stenographic personnel. Where such policies were established, most offices allowed two weeks sick leave with pay. Only 5 per cent indicated an allowance in excess of two weeks of paid illness time.

COMPENSATION AND ASSIGNMENTS OF STARTING PROPERTY MANAGERS

Twenty-five per cent of the management offices responding to our questionnaire do not employ beginners in the real estate management field. This means that they do not train their own management personnel but rely upon initial training given by others.

The amazing rise of wages for starting personnel of all kinds was illustrated by the fact that the highest percentage of CPM offices now start property managers in the range of $300 to $350 per month, while just two and one-half years ago these starting salaries were overwhelmingly in the range of $200 to $250. In 1951 the highest starting wage was reported at $400 per month, which was reported by one firm in the East. In the present questionnaire four firms start at between $400 and $425 per month for property managers; four other firms report starting wages at $425 to $450 per month. It is hard to believe that these starting employees have not had administrative experience in other lines of business or that they are youngsters out of college undertaking their first commercial assignments.

For the first time there appears in the arrangements under which new persons enter the field of real estate management a number of compensation schemes based on a percentage of collections under the supervision of the individual manager. These range from a straight percentage of 25 to 50 per cent of the fees which are produced by the manager's work.

BOOKKEEPING MACHINERY AND OPERATORS' WAGES

The number of firms using bookkeeping machinery has increased from 25 per cent in 1951 to 40 per cent in 1953. This is still a low percentage of mechanization in view of the rising wages and man-power shortage.

Machine bookkeepers in most instances are reported to start work in the range of compensation of from $150 to $200 per month, with the average for the sustained employee falling in the range of from $200 to $250 per month. Twenty-five per cent of all machine bookkeeping operators receive compensation at $300 or more per month.

Hand bookkeeping operators as a general classification (which are the largest number employed by CPMs) were not reported as receiving any higher wages than machine operators. However, a larger percentage of hand operating bookkeepers was shown in the over-$300 per month category than was found among machine operators. This is unquestionably due to the fact that most senior bookkeepers (who also probably act in office managerial capacities) are to be found in the hand bookkeeping classification.

SALARY RANGE OF EXPERIENCED MANAGERS

Most of the practicing property management employees who are charged with administrative duties and responsibility fall within the compensation range of from $300 to $600 per month, with about as many in the $300 to $400 range as in the $500 to $600 range. Only 12 per cent of the property managers in this category were reported to be receiving monthly wages in excess of $600 per month and only one of these was receiving a compensation of more than $10,000 a year. Here again we found an increase in the number of responses which indicated that the property manager on line duty was receiving a commission in addition to his regular salary. This commission was based on collections and breadth of the responsibility in each administrative post. A high percentage of these poperty managers operate their own automobile on a flat monthly car allowance. There was no indication that any management firm is presently making a mileage allowance for personal automobile use.

WOMEN PROPERTY MANAGERS

There are presently more women filling administrative property jobs than ever before, even though the percentage is still less than 15 per cent. Here the average sustained wage appeared to be in the range of $300 per month, indicating that one of the motives for the enlargement of the number of women property administrators was a saving for employers. The top salary, for example, for the highest paid of the women managers listed was $450 per month.

It is unquestionably true that many women property managers are in the *resident manager* class, since the replies indicate that an apartment or some form of free rental is a part of the compensation arrangements. However, there is little doubt that women will be (and are) increasingly used in line administrative jobs in the central offices of property management firms.

WORK ASSIGNMENTS OF PROPERTY MANAGERS

In by far the largest percentage of cases, property managers working in CPM offices are assigned to the administration of actual property and handle all matters pertaining to that property. In only 30 per cent of the cases is property management done on a departmentalized basis with a general manager overseeing all properties and specialized personnel merely handling such phases of management as maintenance, collections, leasing, personnel, etc. It is thus still true that the bulk of the management responsibility in the typical CPM office in the United States rests squarely on individual administrators rather than on the executives of the business. Although no questions were asked specifically as to who held the contact with the

office client, it is obvious that the actual line manager in most cases must be the principal client contact. While he may not originate the business or control the contact, his is certainly the prime responsibility in client satisfaction.

In terms of the number of residential units under a single property manager, the average remains close to 400 units per man. It is assumed that each man is joined in a team by a secretary-stenographer. The highest number of units assigned to an individual person was 1500—a situation which we assume represents either one or more large properties of multiple unit variety. The smallest number of units assigned to an individual manager was reported to be 50. Again it is our assumption that these represent single-family houses and it seems difficult to imagine such a small work load justifying the employment of a full-time person.

NEW BUSINESS POLICIES AND COMPENSATION

In response to the question, "Do you offer salesmen a compensation for obtaining management business?" we found that 62½ per cent of all management firms in which real estate salesmen are employed offer these salesmen some kind of commission compensation for obtaining management business.

There is an almost complete lack of uniformity in these commission arrangements. Among those which are most representative are the following: gross management commission for first six months; gross commission for 3rd, 11th, 19th and 27th month; 10% of the management fee for six months; 3rd, 11th, 13th and 23rd month collections; 50% of the first year's gross commission; 1% monthly on gross rental collections permanently; 20% of the commission permanently; one-third of rental fee for first year.

Examination of the questionnaires again indicated the relationship between the amount of commission paid by CPMs for obtaining new management business and the volume of business reported in another part of the questionnaire. While this is not necessarily conclusive proof that those companies offering the highest compensation for securing new business are most successful in the solicitation of new accounts, it does indicate the need for further study of incentive payments as a basis of client growth.

In some cases, the reports showed that no commissions were paid to employees of the firm for securing new management accounts since the reward for so doing was distributed in a profit-sharing plan in operation at the company. We regret that we did not include questions having to do with the adoption of profit-sharing plans or the installation of pension plans, and we will insert them in our next questionnaire. The Journal plans to continue these periodic studies and hopes future reports will include responses of more than 12 per cent of CPMs.

Only a small percentage of the management offices indicated that other employees (such as stenographic help, cashiers, bookkeepers, property management employees, etc.) were offered any compensation whatever for securing management business. This would appear to be an unrealistic policy in the light of the experience which is reported by those who offer incentive rewards to salesman employees. There is obviously no reason why a salesman should be more generously treated than long-term employees who may have equal access to prospective clients.

From the point of view of the growth or loss of business in CPM offices during the last two years, we publish the net result table of the compilation based on returns from 133 CPMs.

Increase or Decrease by Percentage		*Number Reporting*
Gains	+ 500	1
	+ 100	4
	+ 80	1
	+ 75	1
	+ 60	1
	+ 50	2
	+ 40	3
	+ 30	1
	+ 28	1
	+ 27.5	1
	+ 25	6
	+ 22	1
	+ 20	20
	+ 15	8
	+ 14	1
	+ 11	1
	+ 10	21
	+ 8	1
	+ 6	1
	+ 5	12
	+ 4	1
	+ 3	2
	+ 2	1
	Small increase	2
	No change	22
Losses	− 5	1
	− 8	1
	− 6.5	1
	− 10	4
	− 15	2
	− 20	3
	− 25	1
	− 33	1
	− 50	3
		133

From the above table it will be seen that 70 per cent of all CPMs enjoyed some increase in business during the last two years and that more than one-half showed a net gain in volume in excess of 10 per cent.

It is certainly true that the rate of business expansion has increased since 1951. In some communities this has been due to the end of rent control and the establishment of a free competitive market. This situation will undoubtedly prevail in more communities and will affect more firms in the year ahead since we can expect (in most areas) termination of all rent control on July 31.

In response to the question, "How does your management business originate?" it was again demonstrated that brokerage operations are the surest and most fertile source of new client contracts. The survey shows the following to be the major sources of new business, in the order named: (1) brokerage; (2) client reference; (3) direct solicitation; (4) syndicate operations; (5) mortgage operations; (6) advertising.

In the writer's own experience, one of the reasons why direct solicitation does not lead the list is that most managers are too busy with the details of their operations to spend an adequate amount of time or to direct their staff in spending an adequate amount of time in the actual work of client solicitation. It is quite easy at the point of sale in a brokerage deal to bring up the matter of management. On the other hand, it is difficult to leave one's desk in the middle of a busy day to go out and make a direct solicitation of a management account. Unquestionably, if sufficient time were devoted to direct solicitation, this would lead all other possible sources of new business.

MANAGEMENT VOLUME AND ITS IMPORTANCE TO CPMs

It is still true that most certified property managers are associated with firms for whom the management business is a relatively small producer of income. For example: in only two out of 129 questionnaires answering the question having to do with the percentage of net income produced by the management operation did management represent 100 per cent of net income. In 93 out of these 129 responses, income from the management of property contributed 50 per cent or less of the firm's total revenue.

It is significant to note that the importance of management income, however, has increased substantially since 1951 in man-

agement offices throughout the country. It is safe to predict that this trend will continue, for economic reasons and because men in the profession are doing a substantially improved job of selling their communities on the idea that property administration can best be handled by specialists. It is certain that time devoted to the building of a management business can prove rewarding in the present economic climate.

CONSULTATION SERVICES

In more than 60 per cent of CPM offices consultation service is offered to property owners and real estate investors. However, in 50 per cent of those offices such services are given gratis—as a means of promoting good will or securing new business. It is encouraging to note that the number of offices making a charge for this service has increased since the year 1951. Certainly it is difficult to convince a community that services which are given away have a real value.

The range of fees for consultation services was from $15 an hour to $100 a day. In some cases where hourly charges are made, a minimum fee of $50 for any duration of consultation is fixed. Here again we detect a general increase in fees and a greater willingness of CPMs to place a reasonable charge on the advice which they render out of their experience and knowledge.

CONCLUSIONS FROM THE SURVEY

When we review the findings outlined above, certain conclusions seem to stand out.

1. There is a tremendous need for IREM to devote time and energy to the formulation of standard practices and policies which can be distributed to CPMs for their guidance. Among the policies and practices which badly need standardization are the following: (a) personnel matters such as vacations, sick leaves, bonds, etc; (b) compensation for new business; (c) relationship of management department to other departments in the business; (d) personal allocation of executive time.
2. As noted in our report in 1951, wage costs are mounting steadily in 1953 for the same two reasons which prevailed then. First, trends in the economy are favoring a declining value of the monetary unit and a higher general wage structure. Second, working conditions are steadily being made more favorable for the employee. Longer vacations, shorter working hours, shorter work weeks and broader welfare programs are requiring a higher percentage of the income dollar in every business. In the light of today's conditions, it can be said that these trends will not only continue but are apt to accelerate.
3. Managers continue to be far behind in their employment of machinery for labor saving in their own offices. Although this survey shows an increase in bookkeeping machinery, the number of firms using this equipment is still far below that in competitive fields. This deficiency in mechanization unquestionably applies throughout the management operation.
4. New business is easier to get today than it was in 1951. In all probability it will be easier to get in 1954 than it is in 1953. There is little doubt that most management firms are not aware of this change in general climate but are still going along with inadequate programs of securing new business.
5. It is still a truism that management firms can enjoy improved net earnings in most communities by a combination of management with other departments, most notably brokerage.

How a Los Angeles Realtor discovered the facts of life about bowling alley centers as properties with excellent investment and management possibilities.

THE IMPORTANT POINTS ABOUT BOWLING ALLEYS

by Felix T. Thoeren, CPM

One of my clients asked me to find an opportunity for him to invest approximately $40,000 in a business property, preferably leased to one tenant on a long-term percentage lease. To find such a property in Southern California is like looking for a needle in a haystack. However, I was fortunate to hear of the following deal through another Realtor.

The property consisted of a new brick building located in Hawthorne, an industrial suburb of Los Angeles, and contained a number of unusual features.

Having quickly looked over the property brief, I was nearly ready to discard it. As it happened, lack of pressing business and a certain amount of curiosity induced me to drive the fifteen miles necessary to inspect the property. I was extremely surprised to find an attractive and impressive building on a main thoroughfare.

The property was located on a plot 174 by 206 feet. The improvements were divided into two parts: one building covering 16,500 square feet, with truss roof and high ceiling, which contained a bowling alley, cocktail bar and coffeeshop; an adjoining building of 2500 square feet, which contained three secondary stores. It was evident that these stores had been built mainly as a front for a huge parking lot. They were occupied by a liquor store, an architect, and an electrical contractor.

As to income, the deal presented itself as follows:

The secondary stores were leased at a monthly rental of $300, and on this part of the property the owners had to pay real estate taxes and insurance. The bowling alley lease was very well written, being for a duration of twenty years, and providing an absolute net return for the owners. In other words, the tenants were paying for the entire upkeep of the building, including the outside, roof maintenance, underground plumbing, etc., as well as all real estate taxes and insurance. The insurance clause required the tenants to carry satisfactory coverage against fire losses, damage to plate glass, vandalism of all kinds, as well as coverage for the owners against loss of rental income in case of serious property damage.

The percentage clause contained in the lease was as follows: 8 per cent on bowling, 10 per cent on the cocktail bar, 5 per cent on the coffeeshop, against a monthly minimum of $900.

Mr. Theoren *operates a general real estate office in Beverly Hills, California, and has practiced property management for eleven years.*

This is the property in Hawthorne, Cal., which convinced the author that a well-located, well-equipped and managed bowling alley center will constitute a safe investment for a long time to come.

The bowling alley lease was furthermore extremely well secured, as the tenants owned the entire equipment and furnishings contained in the three departments of their business, free and clear, and had executed a chattel mortgage on this equipment in favor of the owners as additional security on the lease.

After having assembled the information above, I went back to the property for a second look. I still liked it very much, but had to admit to myself that I didn't know a thing about bowling alleys or their operation, and not too much about the city of Hawthorne itself. So I went to work and secured as much information as possible.

Having consulted the census figures, I learned very quickly that Hawthorne had more than doubled in population between 1940 and 1950, while during the same period the population in all of Los Angeles County had increased by only 50 per cent. I also learned that a number of very prominent industries are located in Hawthorne, providing through their large labor force the ideal customers for a bowling alley. The main industries are North American Aviation, Northrop Aircraft and a huge cracking plant belonging to Standard Oil of California.

My next step was to get acquainted with bowling alleys. I found out that the firm of Brunswick-Balke-Collender Co. supplies practically all bowling alleys in the entire country. I visited the sales manager in the firm's Los Angeles office, was very well received and informed that Southern California represented a major market for their products. When I asked about the operators of the bowling alley in Hawthorne, I was told that they were excellent. The information I received was so satisfying that I decided to offer the property to my clients.

Knowing that the property was clear and that the price was firm at $140,000, which represented a 10 per cent return on the basis of minimum rentals, I started out to offer the deal to some of the larger investors with whom I was in contact. I was turned down immediately, because none of them believed in a bowling alley as an investment.

Being tenacious and liking the property more and more as I went along, I finally offered it to the client with the $40,000 to

invest. I showed him the property and he decided that he was ready to acquire one-half interest if I could secure a buyer for the other half, and also if I could secure an institutional loan for half of the purchase price. Within a few days I found another buyer willing to acquire half of the property, but also contingent on my ability to secure an institutional loan.

I obtained bona fide offers from both my buyers and went to work. Most of my loan contacts, representing large life insurance companies, turned me down immediately, with the exception of the local office of New York Life Insurance Company. They made an extensive study and appraisal of the property and told me that it would qualify for a loan if I could submit a different type of main tenant.

The time limit on my offers was running out, and this pressure finally gave me an idea. I arranged for a meeting between the head appraiser of New York Life and the sales manager of Brunswick-Balke-Collender Co. It worked out beautifully, as the sales manager convinced the appraiser of the quality of my prospective main tenant, and definitely helped me clinch my deal. I obtained a first trust deed in the amount of $70,000 to be amortized over fifteen years.

THE DEAL IS COMPLETED, MANAGEMENT BEGINS

The deal was completed and I was retained to manage the property. My experience with its management has been excellent even though a number of problems arose.

The corner store was leased to an electrical contractor who proved to be unsatisfactory as a tenant. I replaced him with a drug store, and arranged for a 10-year lease at a rental low for drug stores. However, the druggist spent a considerable amount of money in fixturizing the store and thereby improved not only the looks but also the value of the property.

The liquor store tenant made a fairly good living, but was not too active. I induced him to give me his business for sale, sold it very quickly to a new tenant, with a longer lease at a higher rental.

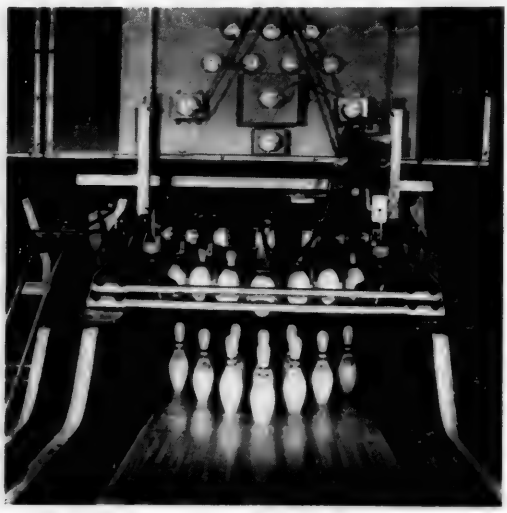
My relationship with the operators of the bowling alley is excellent. Their statements are very clear and complete and I have never found any omission or mistake in my occasional spot checks.

A difficulty developed, however, at the beginning of 1951. One of the owners is a top bowler and has a soft spot in his heart for his fellow-bowlers. For this reason, it took me some time to persuade him to make up his mind to raise prices to the level of his competitors and in line with increasing costs of operation. When I finally obtained his promise to raise prices, we were gifted with the Office of Price Stabilization. All prices, including the price of bowling, were frozen. Operating expenses had gone up and here were my tenants with prices frozen 20 per cent below those of their competitors. They and my owners were hurt seriously.

I went to work—and anybody who has had any dealings with the Office of Price Stabilization will understand what that means.

We had to go through an enormous amount of red tape, start an extensive correspondence not only with the local office but with the main office in Washington. It took me six months, and political intervention, before our request was finally granted. The increase in fees which we obtained enabled the tenants to increase their gross by about $18,000 a year and meant $1500 additional rent for my owners.

Another problem inherent in the operation of bowling alleys seems to be the question of labor. It is extremely difficult to get pin-setters willing to work, in spite of the



Fully automatic pin-setting machines, such as this one made by the American Machine & Foundry Co., will practically eliminate the labor problem that often plagues the management of a bowling alley. The machines should also greatly increase the capacity of the bowling alley, permitting round-the-clock operation.

fact that they earn $15 to $20 per day. I am, however, working with my tenants to overcome this handicap. A costly but very efficient, fully automatic pin-setting machine is being manufactured in Buffalo, New York, by the American Machine & Foundry Company. These machines cannot be bought but are leased and operate on a meter against a minimum. We have hopes of getting these machines installed some time next year. They should, according to my information, practically eliminate the labor problem and increase the capacity of the bowling alley by about 50 per cent. This change will permit a round-the-clock operation, important in an industrial area where factories work in three shifts.

THESE ARE THE MAJOR POINTS

Looking back over my experience of the last three years, I can outline the following points which should be considered seriously when we are consulted by one of our clients as to bowling alleys:

1. *Location:* It is in my opinion preferable for a bowling alley to be located in a middle class neighborhood. Adjoining housing developments are desirable but not essential. It appears that bowlers are more interested in bowling alleys located near their place of work. As a matter of fact, I would advise my clients to build bowling alleys in a location where large industries or large office buildings are located. The labor force represents definitely the best clients for this type of recreation center. Most of the bowling leagues originate in shops or offices, and have proved to be very helpful in creating friendship among the workers. These leagues and their friendly competition have developed into effective morale builders and this fact is recognized by management of business and industry. It is important that the building housing the alleys be fairly modern, clean in appearance inside and out, and surrounded by more than adequate parking facilities.
2. Another dominating factor which is essential for the success of a bowling alley is the *quality of management*. There are very few employees available, at least in Southern California, who are qualified to manage a bowling alley. I found that it requires a considerable amount of salesmanship, patience, tact, and knowledge of bowling to attract and keep a steady clientele. Long hours and hard work are also necessary, and I would recommend a long-term lease whenever feasible, with the tenants operating the business themselves. As a rule the tenant will have an investment about as large as that of the landlord, and consequently will be just as anxious to protect the common interests.
3. *It is important that bowling alleys should be located in a neighborhood where part-time help is available.* This will be a necessary requirement, at least until the time when the pin-setting operation I mentioned above is fully mechanized. Pin-setters work long hours, are usually people with migratory instincts, and create quite a problem for the operators.
4. *How many alleys make the most efficient operation?* My conclusion is that a bowling alley center having between sixteen and eighteen alleys is most desirable as it will accommodate practically all leagues. This number of alleys can also be easily supervised by the owner-operator.

This article explains the various stages in the development of modern elevator systems and also gives directions for analyzing the purchase of a new elevator system for an existing building. It is "must" reading for managers who have the elevator modernization problem much on their minds.

WHAT THE ELEVATOR INDUSTRY HAS TO OFFER

by Henry W. Balfanz

FOR THE FIRST time, the elevator industry is able to offer operatorless elevators for the full field of building requirements, ranging from the single elevator apartment building to the busy office building needing several cars operating as a team. We have reached a point in technical achievement which permits the use of this system for any type of building or traffic problem.

It will lead to better understanding of modern elevators if we briefly review the major developments in our business during the last thirty years.

Prior to 1922, the only way an elevator motor could be controlled was to insert a rheostat in its circuit to assist in acceleration and deceleration. Thus elevators could be slowed down in a series of steps, necessarily limited because of the cost of control and the maintenance problems and with a distinct maximum permissable reduction in speed from high to low. Because of this, elevator controls were relatively expensive to produce and maintain as well as costly to operate, since much of the power was used in heating a resistance rather than in running the elevator.

Furthermore, there was a limit in the higher speed elevator to a direct current supply. This meant that in alternating current districts, elevator speeds were limited to about 300 feet per minute, and landings were inaccurate and jolting.

VARIABLE VOLTAGE

The problem was eliminated in 1922 when the first successful application of *variable voltage* to elevators was accomplished. This was a means of controlling the speed of an elevator by varying the current in the generator field and thereby controlling the output voltage of the generator. For the first time it offered an infinite number of speeds in acceleration and deceleration. The low speed no longer had to be tied to high speed in reduction so that the landing speed could be reduced and the car leveled more easily. It also became possible to run the elevator system with relatively inexpensive and easily mantained control equipment.

The immediate benefit revolutionized elevator thinking. It became possible to build higher speed elevators, since the land-

MR. BALFANZ *is Northwestern District Manager, Westinghouse Electric Elevator Division.*

ing speed could always be the same regardless of top speed and the number of steps could be increased without inordinately increasing controller cost. It also permitted the use of heavier equipment and a greater load carrying capacity of elevators. Without this basic system, the 1,400 feet per minute elevators in New York's RCA Building in Rockefeller Center could not have been built, nor could we have the smooth riding, quiet, speedy elevators found in modern buildings of today.

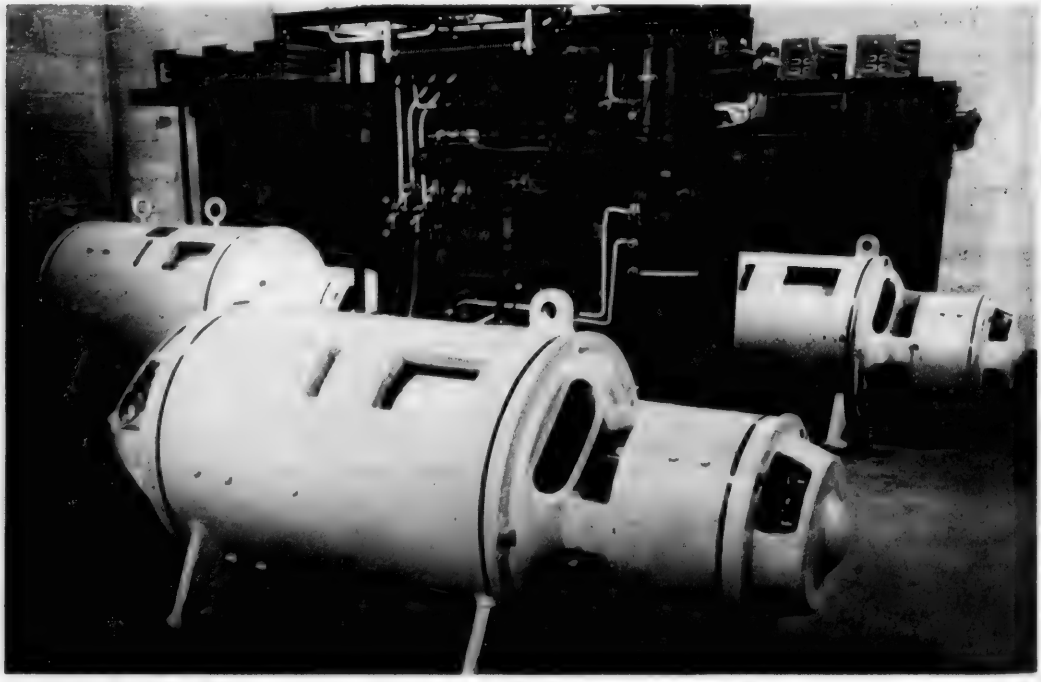
AUTOMATIC LEVELING AND LANDING

With greater speed a reality, the succeeding major development in the industry was *automatic leveling.* It was first brought out to correct the high leveling speeds to be found in rheostatic elevators and done by separate machines. Then, with the advent of variable voltage, it was put on the main motor. This would bring a car level with the floor every time. As elevator speeds were increased, however, it was found that it became more and more difficult for an operator to slow the elevator down efficiently and bring it to a leveling zone. Automatic slow-down and landing devices were provided so that an operator could cut off his car switch a given number of feet away from the floor and the car would then ride into an automatic slow-down and level stop.

SIGNAL CONTROL

When elevator speeds reached upwards of 700 to 800 feet per minute, it was no longer possible for an operator even to see the floor numerals as he passed. This was another speed limiting factor. To solve this problem and to avoid the high percentage of

Motor generator sets used to power the elevator system in the Esso Building in New York City. Generators like these made possible an infinite number of speeds in acceleration and deceleration.



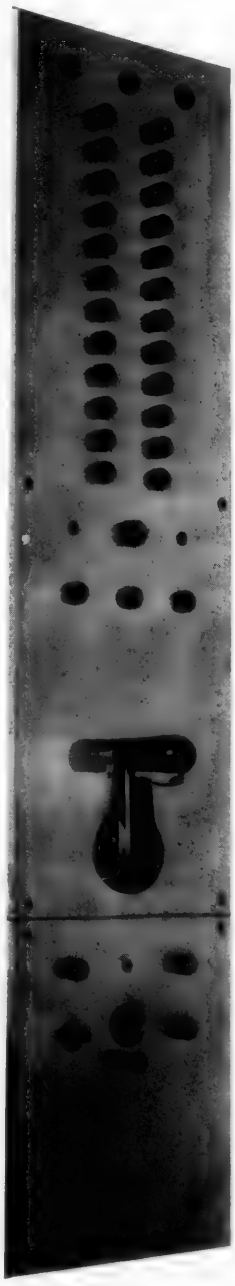
false stops which were developed by the manual control of floor selection, a device was added which automatically selected the point of slow-down to stop the elevator at the proper floor. It depended on the pressure of a button on the floor matched by an electrical impulse device in the car for calls to be registered and automatically land the car.

This system, designed to stop the first coming car of a bank of elevators from a single riser of buttons, was called *signal control.* It made possible the stopping of elevators automatically merely by pressing a button either from the outside corridor station or inside the car. The elevator operator was no longer required to remember the car calls or to try to identify the rapidly passing floor numerals.

POWER-OPERATED DOORS

As the elevator industry advanced in control, leveling, landing and signal devices, the need became apparent for some means of *power-operating doors* to increase efficiency by pre-opening the doors as the car landed. The first of these devices was the pneumatic type, which was expensive to produce and maintain. These deficiencies brought about the need for motor-driven devices of both the master and individual door types.

In the late 1920's, with the development of high speed office building elevators, the automatic elevator for apartment buildings came into its own. As the developments of the past were incorporated in office building elevators, they were added to automatic elevators in apartment buildings. But one major stumbling block remained—some means of automatically opening and closing car and hoistway doors so that a person could as conveniently enter the car alone as he could when the car was operated by an at-



Typical car control station which was developed when elevator speeds reached upwards of 700 to 800 feet per minute.

tendant. This offered some problems. First, while the doors could be opened at high speed, they had to be closed in such a way that if the door should strike a person, it would not cause any injury. This meant slow speed closing. Next, some device had to be developed so that a passenger could not be held in the door. A switch was then added to a soft front edge to cause the doors to re-open if they should strike an object in closing. Instead of this soft edge, light-ray units were used in some cases. These would insure that the doors would re-open without even touching a person, should something interrupt the beam. It offered the disadvantage of not affording protection over the full height of the door.

Another major problem was the high cost of such door devices. To solve it, slower speed, lighter duty and less expensive door operators were developed. But it is of value to note that the first attempts were made to slow down high speed door operators and this became important in later development.

All of these developments in the elevator industry were accomplished by the late Twenties and early Thirties.

NON-ROTATIONAL DISPATCHING

With the tools now available to the elevator traffic engineer, certain problems developed. First, elevators were sent off the ground floor and the top floor in the order of their physical arrangement, called *rotational dispatching*. They were dispatched by a bell and a light. It was noted many times that the last cars to be dispatched would arrive at the floor before the first. This meant that the expensive and efficient equipment was very often held at the terminal floor for periods two to three times as long as necessary to load the car normally. This one step alone caused a serious waste in the efficiency of an elevator system. For this problem, a means was developed to permit the first car to land to be the first car to leave the terminal floor. This system became known as non-rotational dispatching.

ELECTRICAL TRAFFIC SCHEDULING

A second serious problem was that in signal control elevators, as the car returned from the top floor or rose from the ground floor, the calls tended to be answered in order by floors rather than by the length of time the call had been in. This would normally be taken care of in certain periods of the day but in down-peak times (when all people were anxious to get out of a building) it was found that all of the service tended to be concentrated at the top floor and the cars were regularly by-passing lower floor calls.

Also, during some periods of off-peak or middle-of-the-day service, people were bypassed at the upper floors, when they wished to travel up, if there were a sufficient number of calls below them to fill the car. This meant extremely long waits. Again, there tended to be pile-ups of cars at the terminals because they would travel quickly in one direction and slower in the other.

The solutions of these problems offered much more serious obstacles to the elevator control engineer than any previous development. They involved a concept entirely new—that of making an elevator system which could analyse its problems and provide the solution as traffic developed. In other words, such a system would have to approach more nearly the human consideration, as far as mechanical and electrical equipment is concerned, but be more perfect than human reaction.

Developments along this line covered peak period controls; splitting the elevator system into two fixed elevator banks, each serving one-half of the building for outpeak service; quota control and instant sig-

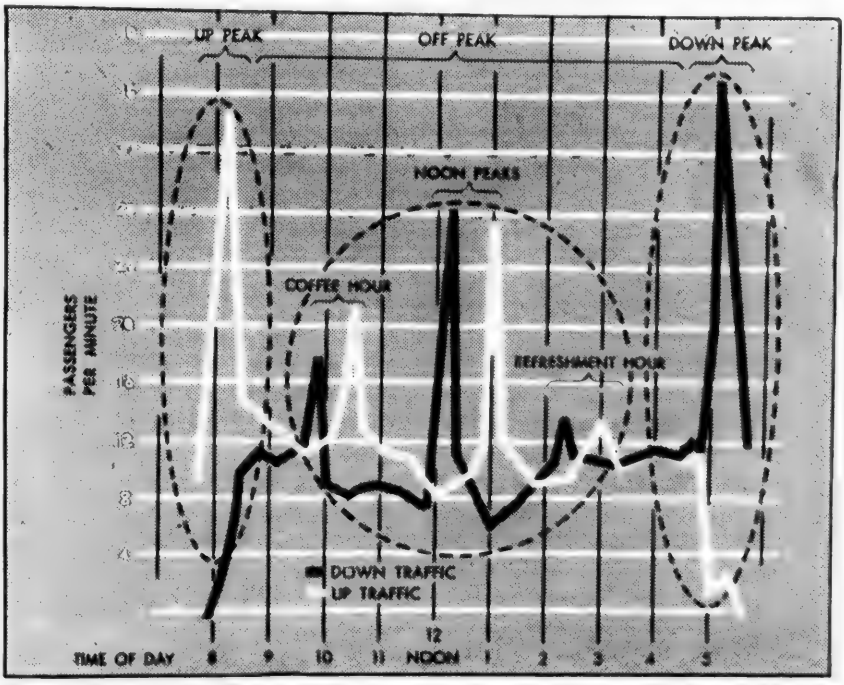
nal, whereby the calls were answered by cars assigned to them in the order of time sequence in which the calls were placed.

There were also spacing systems which held the cars apart to avoid bunching at the terminal and, finally, two methods of automatic pattern control by which a starter could select a period of operation for up-peak, off-peak, down-peak and off-hours, and the system would handle each of the settings automatically. This resulted in Selectomatic Control and Autotronic Control as we know them today. By these types of control, special service is provided for heavy up-traffic off the ground floor for the various conditions of balanced traffic during the off periods of the day; for down-traffic at night; and, finally, for off-hour or after-hour services.

Now what does an elevator operator do in such an elevator system? He presses the floor buttons which the passengers request. Second, he watches a dispatching light which tells him when to leave the ground or top floor. Third, he moves a lever which, in turn, automatically closes the doors. He presses a by-pass button, should he have a fully loaded car, to avoid stopping for useless calls. He makes people get out of the way in a fully loaded car so that he can close the doors and start up. That is his job. Beyond this and three other operations per day, *no human hand need touch such a system*. Now let us examine an operatorless system.

PROBLEMS OF AUTOMATIC SYSTEMS

If we wanted to run such a system automatically, what are the problems? Let us



Types of electrical traffic scheduling were developed which provided special service for heavy up-traffic off the ground floor for the various conditions of balanced traffic during the off periods of the day; for down-traffic at night; and, finally, for off-hour or after-hour services.

look at each of the three most important ones and determine its solution.

Dispatching. Watching a light that comes on automatically is the simplest part of it all. This can easily be replaced by a relay which tells the elevator to leave the floor.

Door Operation. Closing the door is also a relay operation but presents problems. Suppose someone is standing in the doors? They will hit him. For this reason we slow doors down to a safe speed and provide door protective devices, Saf-T edges, Saf-T ray, or other types. Also, we tell people that the doors are closing or are going to close. This is done by means of a buzzer. To get the stubborn people (who insist on jamming the doors) out of the way, we keep the buzzer on while the doors are attempting to close and, after a pre-determined time, nudge people with the doors by refusing to re-open, and applying pressure regardless of door reversing devices. If for some reason the car cannot leave the floor, it is automatically pulled out of service so that it will not interfere with other cars.

By-Passing. This is done by providing a load weighing device on the elevator that measures the load in the car. When the car is full, it is dispatched before the normal interval and is not permitted to answer any hall calls until the load has been reduced.

Thus it is easy to contemplate the operation without attendants of a modern elevator system involving all the latest developments. But of course there are also problems.

PROBLEMS OF OPERATORLESS ELEVATORS

First you must remember that, by eliminating an operator, a certain policing effect is lost. The mechanical act of an operator in running a car can be replaced but he will not be there to prevent abuses. These, too, must be reckoned with.

First, let's take the passenger who probably drives down the middle of the road when he is on the highway. This same type of person rides an elevator. In an operatorless car he is the fellow who holds the door while talking to a friend or rushes madly to the elevator to hold it for his friends. He's the "road hog" of an elevator system. The way we have to handle him is to fix it so that the doors close insistently, as described above—not enough to hurt him but hard enough to make it uncomfortable to try to hold them. Also, the buzzer would be somewhat annoying and call attention to what he's doing.

This same person is the one who presses the "up" button on the manually controlled elevator when actually he wants to go down. The operator doesn't have to pay attention to him, but an automatic elevator system must. It has no means of knowing that he does not want to go up but merely wants to get in first. The best way to handle him is to disconnect the button for the period of out-peak, permitting, if necessary, only one car to serve such "up" call so that he will have a nice long wait for his pains.

This is the same fellow who presses the button to send a special car to the floor where his friends are waiting, forgetting that there are other people in the building just as anxious as he is to get home. Here, again, we have to disconnect the car buttons until the door closes so that if he wants to call for his friends he'll have to act like the elevator operator.

A TYPICAL CASE

Now let us trace what an automatic elevator does in a typical day. We are using office buildings as an example because the most common use of multiple car banks is

in office buildings. However, it can just as well apply to hotels with highly concentrated traffic, in hospitals, or major apartment buildings. Periods of the day may vary. What we are describing is something for mass transportation. In the morning every one wants to go up. The system is set on up-peak control. This merely dispatches one car at a time off the ground floor at regularly timed intervals, or earlier if the car becomes loaded before the end of the time interval. In this case, the interval of every car is advanced. The cars travel up, answering calls as they reach the various floors; go to the point of highest car call or corridor call (should there be one at this period of the day); then return immediately to the ground floor to be available for the next "up" trip.

With heavy concentration, the elevators may be split into high and low rise banks so that two cars may leave the ground floor at a time, each serving a smaller number of floors. This allows quicker round trips and takes a greater number of people off the loading floor. The system is then set for off-peak. During this period of time we measure the activity of service by measuring the number of car stops per minute, excluding the terminal. If the activity of service warrants, we speed the system up by permitting cars to leave the ground and top floor at more rapid intervals. If there is little demand for service, the system is slowed down. Some systems are arranged so that they do not cause the movement of any car until a call is actually registered. This conserves power and wear and tear of equipment, and is for very light off-peak.

As the demand for service increases, it is possible that the system may not provide a car at the upper terminal at the time it should leave. If this occurs, the car is automatically reversed at its highest call and sent back down to permit it to make up some of the time lost through heavy traffic conditions. If heavier "up" traffic is developed, more cars are assigned to it at any given instant than "down" to handle this condition, and vice versa. This system normally automatically takes care of noon service and the coffee and coke hours in the average office building. Then at night, the system is switched to down-peak.

With Selectomatic, the system is split into two banks of elevators to provide a service available for the lower floors, should there be sufficient demand to keep the cars busy. However, if demand does not develop, these cars will also serve the upper landings. Similarly, if there is a bulge in demand at the lower part of the building, the upper floor cars will help out. "Up" traffic is only handled by the high rise bank to permit the low rise cars to give maximum service to the lower floors. This normally evens service out throughout the whole building.

After this down-peak is over, the system is put on an "off-hour" service. This means that all cars will return to the ground floor when there are no calls. After a set period of time the generator sets of the elevators will shut down. On one car the doors will be left open and the signal light on over the entrance—announcing that it is ready for service. However, its generator too will be shut down. The registering of a call will cause the generator to start and the car to travel in response to that call. Should further calls develop and this car be able to answer the calls and return to the ground floor before the elapse of a set time interval, it will continue to answer all calls. However, should the car fail to return and calls develop behind it, a second car will start up and serve. Similarly, other cars will start up for service so that if there is any tendency for heavy service after hours, all cars are ready to go

into service. No attendant is ever required. At the conclusion of this service period, the last car down with its doors open will be the car which becomes the one available for service after all generators have shut down. This normally permits the system to drift into up-peak in the morning before it is necessary to turn on full up-peak service which starts all the generators.

PUBLIC REACTION

In the buildings in which the automatic system has been installed, we have found that people like to be their own elevator operators. We have found that there are a certain number of discourteous people and have established the required mechanical corrections. On the other hand, we find that, in the main, people let the elevator system operate more or less as it should. We have had no serious complaints as to bad elevator service and a surprisingly limited number of elevator shutdowns and calls for maintenance service. Many building operators tell us that the elevator system seems to work better than manual control in spite of the fact that the doors must be made to close more slowly and the car must be allowed to remain at every floor a fixed amount of time sufficient for people to enter. We can understand this on the basis that the robot we supply cannot forget the "start" light it leaves on signal, whereas a man may be diverted in his attention, talking to a passenger or being attracted to something ouside of the elevator.

FACTORS IN ELEVATOR MODERNIZATION

There are four fundamental factors that cause elevator replacement or modernization. The first is that the equipment is so old and obsolete that it can no longer be maintained at any reasonable cost and the parts are not readily available.

A second reason is that the equipment has reached such a state of wear that it becomes too costly to maintain and subject to an annoying amount of shutdown, even to the extent of damaging the building's reputation and income.

A third reason for replacement is brought about by competitive demands—the desire for a building to keep its equipment up to the standards of competing buildings in order to maintain its position.

We would like to suggest a fourth reason and one which is not always given its proper importance. That is an economic consideration; the fact that, in the desire for replacement, too little evaluation is made of the advantages to be found in operating savings and possible lowered first cost by studying true building requirements.

Let us examine the elements of good elevator purchasing and what should be considered in competitive demands and economic factors.

Analyzing the Purchase of a New Elevator System

IN ANY BUILDING, adequate elevator service must include provisions to handle the incoming peak loads, free and sufficient service to provide for whatever demands may occur during the day, and a study of the mass downward movement requirements.

There are, of course, many ways of providing adequate service. If this were the only element to be considered, the problem would be simple. We could use the old rule-

One of the main reasons for elevator replacement—competition forces a building to modernize its equipment.

of-thumb method—one elevator for every 25,000 square feet of building area in an office building. To do this, however, would be to presume there had been no real progress in the field and not recognize the strides made in the last twenty years.

We must consider a second element, namely, the efficient use of equipment, both as to first costs and operating costs. By this we mean balancing the cost of more efficient equipment against less efficient equipment. We have often wondered why we could not develop a formula for elevator consideration to permit the buyer to purchase on the basis of first costs and operating costs per passenger per car mile. After all, operating a building is a business and could almost be considered as a factory dealing in space. Therefore, why not take advantage of better machinery and by so doing, in the face of rising costs, still be able to remain competitive in "product" and maintain profits?

A third element let us call "Keeping up with the Joneses." This is important, not just as a matter of pride but more as a matter of keeping your building up to modern standards to maintain its class. There are many buildings in the country—well designed and well maintained—in which just a relatively slight amount of additional investment could result in very great gains.

Let us now take these elements and expand them slightly to see if we can simplify the problem in some manner.

First, the problem of adequate service. The first points to be considered are the

physical and population characteristics. Take the population by floors. Where a floor is not being fully utilized, apply a population factor to allow for most efficient use of the space for the proposed population growth. Study the type of tenancy as a measure of the number of visitors which could be anticipated to each space. This can be carried out simply by counting noses. Also, the elevator engineer should run a count in the vicinity of rest rooms and other areas of in-building floor-to-floor travel.

The next step in a study of adequate service is a traffic count to indicate the exact population movement. This would require the help of an elevator traffic engineer. These men are available at most elevator companies and some consulting engineers and larger architectural firms. They can, and will, set up the proper means of making a traffic study, which you can make yourself. It will, of course, have to be analyzed by the traffic engineer. Many of you have probably taken advantage of this type of service.

With this information you can then get a report covering the type of equipment to be used. Preferably this report should be written not only around the results of the population count and movement but, also, on what can be considered good practices for your building. While this varies from building to building with different types of tenants, there are certain fundamentals that are important.

Over the years we have found that in the average office building 10 to 15 per cent of the population will enter in five minutes in the morning. This would cover the in-peak. We also have 10 to 15 per cent of the population to be handled in five minutes during out-peak. For off-peak, we refer to existing population movement. This would give us an idea of the average number of stops per round trip during the off-peak hours and the average number of people handled, to be interpolated for any population increases. With these figures, it would be possible to predict an average round trip time and, therefore, an average interval to be obtained with any specified system.

In hotels, for example, during check-out and dinner periods it is possible for 125 per cent of the population to move in one hour in both directions, with a high peak of 10 per cent of this hour's movement in the top five minutes. Thus 12 per cent of the population could move, stopping "up" and "down" in five minutes and must be reckoned with in a traffic study.

This brings us to what I feel is the most important consideration of all—the efficient use of equipment. It is, in my opinion, the true test of the successful elevator system. When you buy an elevator modernization job or equip a new building you must give consideration to safety, comfort and appearance. Beyond this, however, you are not just buying a certain number of elevators with a certain speed and capacity. You should think in terms of a sufficient amount of equipment to distribute the number of people in the building over the various floors.

On this basis, you must remember when making an elevator modernization purchase that you are actually getting an elevator system rather than just a number of elevators. By following this trend of thinking, you are more apt to analyze properly the recommendations in the light of what they will do for your building. In many negotiations for the puchase of elevator modernization equipment, it becomes all too apparent that the purchaser, for lack of a better measuring stick, is influenced by the capacity, speed, and number of elevators furnished by one company or another and not enough concerned by the manner in which these elevators are arranged to operate

as a team—in other words, by traffic pattern.

We very often find that in purchasing elevator equipment, the owner or agent is diverted from the main consideration of his problem by stress on one or more characteristics of the system alone—speed, passenger capacity, door operation, and the like. Now each of these is important in itself. No one is the most important, nor does each have the same importance in every building. In one instance a purchase was made of one slightly higher speed elevator in a 15-story building in the hope it would take the place of two elevators. The round trip time was such that the owner would have been better off had he purchased two elevators at somewhat greater cost but slower speed.

The factors of speed and capacity must develop around the total height of the building, whether or not the elevator is to be used in an express or a local bank. Then you can gain the full advantage of speed. Also to be considered is the probable number of stops, in order to determine whether or not the elevator can get up to the speed desired. Capacity should be determined by the people who will be available at any one interval or who can gather at any one interval to fill the car quickly and efficiently. It is usually found wise to anticipate not more than 80 per cent of full load in any one trip since it allows easier traffic movement within the car and avoids the long waits which sometimes occur when the person in the back has to get off at his floor. Furthermore, it may be found that a through-trip service in some buildings is advantageous. But in other buildings it is better to have the cars reverse at the highest call or the lowest call. This should also be considered.

It very often happens that existing buildings are "over-elevatored" in the light of present equipment. To better illustrate what can be done to reduce the number of elevators used, let's consider a typical building on a manual basis first.

Let us say we have a building 12 stories high with 200,000 square feet of rentable area above the first floor. In the past a rule-of-thumb decision of 25,000 square feet per elevator resulted in the purchase of 8 elevators, 2,500 pounds capacity at a speed of 600 feet per minute. A car switch generator field control was supplied. Building population is 2,000.

For the purposes of simplicity, let us consider only out-peak. Making a traffic analysis of this system, we have the following results: a total of 12 persons carried on the average round trip of each elevator at a round trip time of 142.6 seconds. The number of passengers carried in 5 minutes one way was 219, which is 10.9 per cent of the population, just about at the low end percentage given earlier. The average building emptying time is 45.6 minutes—again over the maximum.

Now let us take this same building, reduce transportation by two cars and apply to it all of the modern developments—flying stop or automatic landing control, high speed power operated doors, signal control, and the most modern traffic handling method for dispatching. This results in a total population carried of 283 persons or a total of 14.1 per cent in five minutes, or near the top of what we said was good practice.

In discussing this with one of my building manager friends, he gave me a schedule of the manner in which he would propose to operate the elevators in such a building. For the 8-elevator bank, this gave us 12 men. Using the Chicago rate, each man would get about $338 per month making the daily cost of operators with this system $184.

To puchase such an elevator system in this market, one would spend a minimum of $45,000 per car including doors and cab.

Amortizing this investment over 25 years, we get an equipment cost of $45 per day. Figuring maintenance at a fairly average figure for this type of equipment, we get a cost of about $31 per day or a total of $260 per day as actual cost of this system.

Now let us take the same building, only using six elevators, which we have already determined are somewhat more than adequate. These elevators would require nine men at a cost of $135 per day. However, this equipment is somewhat more costly. Let us apply an average price of $63,000 per elevator amortized over 25 years. This would be $54 per day. Similarly, maintenance would be about $36 per day, a total of $225 per day. Thus by purchasing more expensive equipment, the net savings are $35 per day or about 13 per cent.

Another factor you should consider is that, even on a maximum equipment basis, the actual cost of equipment amortized over 25 years is less than one-half the cost of operators' salaries. Thus, the important decision in purchasing elevators is as much the cost of operation as the initial investment.

With operatorless elevators, the savings would be $153 per day or about 60 per cent, allowing for two lobby attendants.

Consider how much the savings would be by converting this system to completely automatic at, let us say, some 5 to 10 per cent reduction in service to allow for time delays at the floors and other problems of automatic elevators. The cost would be only about 3 to 5 per cent more, and it would give better service than the existing system.

On the basis of modernization, of course, assuming that existing equipment had already been amortized, your investment in the most efficient equipment would pay off whenever you wished to modernize, and at a much greater rate.

Now let us take one more building. This happens to be a building 11 stories in height, now serviced by four passenger elevators provided with self-leveling and pneumatically operated doors. The duty of the equipment is 2,500 pounds capacity at a speed of 450 feet per minute. This building now has a staff of eight operators. We made a complete full day traffic study of this building and plotted on a graph the passengers per minute over a full day.

The passengers per minute at 8 o'clock amounted to three and one-half persons. This built up gradually to a peak of seventeen persons at 1 o'clock. The real peak extended from 10 o'clock through to 3 o'clock. On this same chart we plotted two lines. One line represents the number of people who could be carried per minute by a fully automatic system (no attendants), if each elevator handled only two people per trip. On this basis we could carry about six and one-third people per minute. The second line indicated the handling capacity per minute with four people per trip, or less than we would expect at the peak. This illustration covered about ten and one-third people per minute.

Here is a building offering very definite possibilities to the elevator engineer and to a far-seeing building management. By proper selection of automatic equipment and some promotion of the idea among the tenants, this building could very well operate through the use of automatic equipment until as late as 11 o'clock in the morning to 2:30 in the afternoon, or even all day, with the resultant savings in operators' salaries. By our calculation in this particular building, we feel that a saving of at least $700 per month can be made and would go a long way in the direction of paying for such a modernization program.

Naturally this is an important step for any building, but it doesn't have to be taken

all at once. It is possible to approach this system progressively—and, incidentally, the difference in cost between a system which is fully manually controlled (though of most modern design) and one which offers the option of automatic operation is relatively small.

AUTOMATIC TRAFFIC PATTERN CONTROL

As this article was being written, the Westinghouse Company announced the latest development in elevator dispatching —"Automatic Traffic Pattern Control." This device acts as an electrical brain, determining the traffic requirements of buildings by electronic measuring devices which automatically switch the control to the car and most efficient method of operation at any time in the day without human attention. This system, because it is consistently on the alert, can quickly evaluate and solve the traffic problems as they develop rather than wait for a starter's reaction. This frees the starter for other service in the lobby.

Questions Which Must be Answered in Purchasing Operatorless Elevators

Things you can and should know:

(a) What is the building population by floors?
What type of tenants?
Are there any large tenants (heavily loaded floors or multiple floor occupancy)?
What are starting, quitting, and lunch hours generally?

(b) What is present schedule of operators and elevators?
What is annual wage?
What are other costs such as uniforms, taxes, and benefits?

(c) What population growth or chance can be anticipated?

Questions on Which You May Require Technical Help

(a) Population movement generally and during busiest 5 minutes of the day

(b) What is an ideal set-up?

(c) What portion of existing equipment can be used?

Questions Affecting Equipment to Purchase

(a) What provisions are made for maximum safety and comfort?

(b) What provisions are made to overcome abuse?

(c) What provisions are made for sudden peaks?

(d) How flexible is the system?

In gathering data on a property, the appraiser looks at maintenance and replacement policy from four angles: (1) effect on the physical structure; (2) effect on the income stream; (3) determination of proper future allowances or charges for maintenance and replacement; and (4) the weight to be given to these matters in the various approaches to the final value figure.

WHAT MANAGEMENT MEANS TO THE APPRAISER

by Fred L. Chapman, CPM, MAI

IN MAKING his inspection of a property, the appraiser is mentally noting (and should actually write down) much of what has happened to the building under previous management. Such factual reporting must always be done no matter how much money has been spent on the property for maintenance and replacement by management. The effect on the physical structure of past maintenance and replacement policies will be measured in terms of whether such policies called for niggardly, intelligent or lavish expenditures.

If ownership or management, or both, have been niggardly, the appraiser will find the property in poor condition, or at least in only fair condition. Then it is obvious that in the future, and under intelligent management, the property will require a greater than average amount of money spent in maintenance and replacement. In this case, the necessary expenditure for work, labor and material required to bring the property back to reasonable condition might be considered by the appraiser as a capital investment instead of a charge against income. The appraisal could then reflect a replacement value or cost figure which has been reduced proportionately by the amount of such necessary expenditures.

If the property has had intelligent management, the appraiser will find it in proper physical and operating condition. Thus he will be able to apply average and reasonable cost and depreciation concepts.

However, if the owner or management has been lavish in expenditures, the property generally will be in very good condition from a physical standpoint. Here again the appraiser usually but not always will be able to apply a reasonable cost and depreciation concept.

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EFFECT OF PAST MAINTENANCE ON FUTURE INCOME

In moving on to the second consideration –the effect on future income of past maintenance and replacement policies–many interesting questions arise. If expenditures have been niggardly, then obviously under intelligent management allowance will have to be made to bring the property back into proper condition. Under such circumstances, such cost should really be considered as a capital investment. However, the individual owner may, as a financial or tax matter, find it necessary or advisable to make such improvements out of current income. This simply means that he will take less money out of the property. No matter which way the new management may do it, the appraiser must show, in a lower valuation figure, the effect of such neglect.

If expenditures for maintenance and replacements have been intelligent in the past, then the future income stream will flow as naturally as water in the pipes of the building. If normal allowances are made for future maintenance and replacement, the net income stream will be at a maximum over a long period of years under the continuance of an intelligent management policy. The appraiser generally should assume intelligent management for the future in making his appraisal.

Under previous lavish expenditures, the appraiser may be confronted with several important problems. Generally speaking, lavish expenditures mean that the property is in good condition. With the property presently in good condition, a future intelligent management policy should enable the owner to realize slightly more at first in net income. It is not important as far as the appraiser is concerned whether the management was excessive in its expenditures as a result of lack of knowledge or whether the exigencies of a situation required the acquisition and use of expensive work and material. The appraiser is looking into the future and considering the effect of such past expenditures on the future income stream.

During 1946 it was frequently impossible to secure steel piping to replace water lines in buildings. As a result, management was often required to purchase copper piping and expensive fittings in order to make repairs and maintenance on old lines. In a new building it might well have been proper management to have used copper. In an old building that had nearly completed its useful life, such expenditures certainly were not good business from the standpoint of producing the most net income from the property. However, in these cases the more compelling factor–that of keeping the building open–required the operators to take whatever materials were available at the time in order to complete such emergency repairs. Naturally, where the use of copper piping for water line has occurred, the appraiser can give credit for better present physical condition, as well as reduce his estimate of maintenance and replacement cost for the future, thus swelling the income stream to that extent. This, of course, would be true in all buildings regardless of age.

Sometimes, either because of necessity or poor judgment, equipment of the very finest type is put into middle-aged or older buildings in a rather poor neighborhood. A study of the rental income possible in such a neighborhood would have indicated a lack of judgment in such decision in many cases in normal times. Again, however, the appraiser is not concerned with whether the judgment has been good or bad. If the work has been done, his only concern is, will it reduce maintenance and replacement costs in the future? Obviously, in most cases it

will, at least at first, and the net income stream will be slightly larger in the first few years following the date of the appraisal. The appraiser must be aware of this and reflect the situation through reduction in maintenance and replacement cost allowance.

A note of caution is in order here. Some expenditures, even though lavish, might affect the future income stream adversely. Even though improvements were expensive, they may be more costly to maintain. It is conceivable that an owner might lease a property to a tenant for 10, 15 or 20 years for commercial purposes. The tenant might put on a very expensive, very showy, and perhaps intricate facade which might be the best design for his purpose but would be highly undesirable for most ordinary commercial operations. An entire replacement of the facade might be necessary for the succeeding tenant. It might be, too, that the cost of keeping up such a splendid front would be far greater than for the usual commercial type. Or take a beautiful job of expensive white enamel painting of old woodwork in a low-priced rooming house. Such white enamel would be expensive to keep up and a future owner might have to repaint the old woodwork some dark color that would last a greater number of years.

The appraiser must investigate such changes, conditions or needs carefully. He must decide whether or not future maintenance and replacement cost will be increased or decreased as a result of past performances. However, in general, it is fairly safe to state that past excessive maintenance and replacement expenditures will reduce the cost of future work, for a limited time at least, and in some cases for a considerable length of time. Then naturally, the appraiser will and can give the property value the benefit of a greater net income stream in the future.

An appraiser and also the property manager should always remember that what might be a lavish expenditure on a middle-aged or older building in a very poor neighborhood might be a proper and intelligent thing to do on the same type of building in a better neighborhood. The appraiser can never get away from considering the weight of neighborhood influences in approaching any part of his problem; neither can the property manager.

MAINTENANCE IN THE COMPARISON, REPRODUCTION AND INCOME APPROACHES

In working out his comparison approach, it is quite simple for the appraiser to understand that if past expenditures for maintenance and replacements have been niggardly, then the property will sell for less than better maintained properties. In normal times he will find some properties that have not had proper maintenance, and he can compare these with the property he is appraising. Run-down properties have always had speculative possibilities. Realtors know of hundreds of cases where investors or speculators have bought a piece of run-down property, fixed it up with a few repairs, paint and a good cleaning, and then sold the property at a profit after paying for all the cost of fixing it up. The appraiser must be careful to estimate properly the degree of the run-down condition in comparing the building with similar properties. If he does this and uses like properties in his comparison, he will not be in danger of over-estimating or under-estimating what might properly be termed the reduced value of the property resulting from the effect of niggardly maintenance and replacement policies before the date of his appraisal.

In the comparison approach where the expenditures have been intelligent in the

past for maintenance and replacements, and where the property has been and is kept up in good usable and proper operating condition, the appraiser has a good piece of merchandise to compare with other similar property. We all know that nice, neat, clean, attractive merchandise does sell and rent for more. The appraiser knows this and must recognize it in making his comparison approach figure. Again, he must be sure that he has properly estimated the type of maintenance and replacement the property has had and compare it with similar properties, both in this respect as well as in regard to the price class and neighborhood.

Finally, in the comparison approach, if the property has had lavish expenditures for maintenance and replacement, it is generally in the very best of condition. Things simply shine at any time and the property does not show its age. During World War II an apartment house property in Minneapolis that had had this kind of treatment actually sold for seven times its gross rental, in a very good neighborhood, when similar properties with average maintenance and replacement were selling for around five to five and one-half times the gross. The shiny condition of the property happened to appeal to one particular purchaser and he (in this appraiser's opinion at least) paid an excessive price for the property at that time. It is true that for a time the purchaser would have a lesser expenditure for maintenance and replacement because of the perfect condition of the property. However, it is doubtful if such lower expenditures and increase in net income would be sufficient to offset the far greater price paid for the property. Again, the appraiser must estimate the degree of maintenance and replacement the property has had and endeavor to compare with similar properties. This is sometimes rather difficult to do. In the case of the apartment house mentioned above, there might not be sales of other properties that had been kept up as well. In such a situation, it naturally follows that only limited weight can be given to comparing sold properties of a similar type but not in the same condition as the subject property.

In the reproduction approach, which is based on cost of building new today less depreciation and obsolescence, the appraiser must be careful of his conclusions. If expenditures have been niggardly for maintenance and replacements in the past, that doesn't mean that the building is going to cost any less to reproduce new, but it might and undoubtedly would mean that depreciation would be greater. If the appraiser is using a straight line depreciation rate, he would undoubtedly charge a higher rate per year in estimating the amount of depreciation that has occurred. It is a fair assumption that in most cases the life of the property would have been shortened. This would be the simplest way for the appraiser to handle the matter and to present his figures.

If the structure is fundamentally sound, consideration might be given to the thought of setting up the reproduction cost new, less ordinary depreciation, and deduct the cost of bringing back the structure to a reasonable normal condition. It is also possible that under a niggardly replacement policy, the building has a greater degree of obsolescence than would otherwise be true under property management. This would be especially so in older buildings. The subject property might, therefore, receive an added deduction to take care of accrued obsolescence.

If the property has had intelligent management, the appraiser can then, in working out the reproduction approach, use normal, average estimates of reproduction costs and

rates of depreciation. Here the appraiser's experience through the years can be very helpful. Many useful studies along this line have been published.

The United States Treasury Department, Bureau of Internal Revenue, has issued a guide covering depreciation rates on buildings and equipment. It is known as *Bulletin "F", Revised January 1942, Income Tax Depreciation and Obsolescence Estimated Useful Lives and Depreciation Rates.* This bulletin states: "The useful life of a building for business purposes depends to a large extent on the suitability of the structure to its use and location, its architectural quality, the rate of change in population, the shifting of land values, *as well as the extent of maintenance and rehabilitations.*"

The standard depreciation table used by the U. S. Bureau of Internal Revenue is as follows:

	TYPE OF CONSTRUCTION (*in per cent*)		
	Good	*Average*	*Cheap*
Apartments	2½	2½	3
Banks	2	2	2½
Dwellings	2	2½	3
Factories	2¼	2½	3
Farm Buildings	2	2	2½
Garages	2	2½	3
Grain Elevators	1½	2	2½
Hotels	2½	2½	3
Loft Buildings	2	2	3
Machine Shops	2	2½	3
Office Buildings	2	2½	3
Stores	2	2	2½
Theatres	2½	3	3½
Warehouses	1½	2	2½

Any good income tax service will also be helpful to the appraiser in special cases.

In the reproduction approach, if expenditures have been lavish, the appraiser may find that the life of the structure has been prolonged. For the average neighborhood it would seem best to use the reproduction cost figures of the structure new today for an average competitive structure, rather than to reflect depreciation over a longer period of years. If, however, lavish expenditures have contributed to obsolescence, then the usefulness of the structure may have been impaired and its physical life shortened.

In so far as maintenance and replacement are concerned in the reproduction approach, it may be stated as a general rule that their primary effect on this approach lies in reducing or prolonging the life of the structure. Consequently, the proper concern of the appraiser is to determine and apply the right depreciation rate and obsolescence discount.

In the income approach, the effect of a past policy of niggardly expenditures for maintenance and replacement brings the appraiser face to face with the dollar and cents return on the property. If expenditures have been very limited in the past, then the future success of the property under intelligent management will require either a capital outlay to bring the property back into condition or a more or less prolonged period of robbing the net income to rebuild the property.

In the purchase of run-down property, most buyers intend to and do make an immediate outlay to bring the property up into average and better operating condition. However, in some instances this is not sufficient to produce the same net income stream that an owner could expect to receive from a comparable competitive property that had always had proper and intelligent management.

Many management men know of structures that have been permanently impaired in value and use because of inadequate maintenance and replacement in the past. The neglect has gone down into the very vitals of the building. Even an expenditure which would appear to bring the building up to par may not have touched damage

which will take its toll of the income stream at some unknown date in the future. The roof may have been neglected month after month, water may have gone into the steel columns of the structure, there to turn the load-bearing steel slowly to rust. Years later, the sagging of the floor will result in an investigation and the unfortunate disclosure of a weakened loadbearing beam. At considerable and sometimes great cost, the owner is forced to make a replacement.

What can the appraiser do about this future catastrophe? It seems to me he can realize that such things do happen where buildings have run down. As a result, in working out his operating statement he will set up a somewhat higher figure for maintenance and replacement than he otherwise would do. This, of course, reduces the net income stream, which is always the long-term effect of a niggardly policy of maintenance and replacement.

Management, generally speaking, is intelligent. It is becoming more so as The Institute of Real Estate Management grows in number and in educational activities. Consequently, in the income approach to the valuation of a property which has had intelligent management and, therefore, reasonable expenditures for maintenance and replacement, the appraiser can be much more sure of his ground. He has a greater fund of experience on similar well-managed properties to assist him in setting up his operating statement. He can be more sure of his average costs. His average estimates will be more nearly correct in such a situation. He can proceed with more assurance, and as a result his net income stream will be normal and his income approach figure more accurate.

In the valuation of those properties where there have been lavish expenditures for maintenance and replacements, the appraiser will need to proceed carefully. Generally speaking, if the expenditures have been lavish, the property is in excellent condition. Here then, the appraiser must look to the future of the property as it would be operated under average intelligent management. If there are no unusual obsolescence factors as a result of the lavish expenditures, the appraiser can very properly estimate that the future expenditures for replacements and maintenance, at least for a time, and in some cases for a considerable time, will be less in amount. This will mean a greater net income stream for the first part of the remainder of the life of the structure. With a greater net income stream to be capitalized, the appraiser will find a higher income approach figure.

On the other hand, if these lavish expenditures have created an unusual condition that is not in keeping with what the average tenant or owner occupant desires in the property, the appraiser has an obsolescence factor to consider.

ALLOWANCES FOR FUTURE MAINTENANCE COSTS

What are proper allowances in an operating statement for maintenance and replacement costs? How can they be determined? How can an appraiser analyze the difference? How much weight can be given to average costs when he is valuing a piece of property from an income standpoint?

First, it might be in order to define the difference between maintenance and replacement. Maintenance includes those operating costs which should be incurred under intelligent management in order that the property be maintained in a reasonable and normal operating condition acceptable to an average and reasonable occupant for that type of property. The property would be maintained in a reasonable and normal operating condition to fill the ordinary

needs of the average tenant or owner of that type of property.

The average person has in mind maintenance and repairs to the extent that these are the ordinary and modest repairs and work done at fairly frequent intervals. A few examples are: repairing but not replacing the roof; repairing the plumbing but not replacing a toilet with a modern stool and flush tank; papering, painting inside and out; cleaning the furnace or the boiler tubes each spring; mowing the lawn and trimming shrubbery at regular intervals; regular cleaning and janitorial work.

Replacement involves the discarding of worn-out equipment which cannot be put in shape by ordinary repairs or equipment which is inefficient. There is some difference in opinion as to whether replacement might include major repairs such as putting new grates or new tubes in a large boiler. In a federal income tax case the following statement was made (*Illinois Merchants Trust Co., Executor, 4 BTA 103*):

> In determining whether an expenditure is a capital one, or is chargeable against operating income, it is necessary to bear in mind the purpose for which the expenditure was made. To repair is to restore to a sound state or to mend, while a replacement connotes a substitution. A repair is an expenditure for the purpose of keeping the property in an ordinary efficient operating condition. It does not add to the value of the property, nor does it appreciably prolong its life. It merely keeps the property in an operating condition over its profitable useful life for the uses for which it was acquired. Expenditures for that purpose are distinguishable from those for replacements, alterations, improvement or additions which prolong the life of the property, increase its value, or make it adaptable to a different use. The one is a maintenance charge, while the others are additions to capital investment which should not be applied against current earnings.

The appraiser's task is to determine and set up what are normal and proper maintenance costs in his operating statement and what are proper annual charges for replacements which occur every 3, 5, 10, 20 or more years and not annually. In an office building, some decorating is done each year but the roof is replaced only every 10 or 20 years. There are always some minor or modest repairs on a boiler. An occasional tube might be replaced now and then, but all the tubes might be replaced simultaneously only a few times in the lifetime of the boiler. Many other examples could be given.

The appraiser in setting up his operating statement must also consider the age of the structure, original construction quality and the character and extent of repairs and replacement. If the property is well built and well maintained, repairs and replacements will be less than in a cheaper, poorly built structure under niggardly maintenance and replacement policies.

The proper rental scale is also a factor in determining the extent to which intelligent management should go in providing maintenance and replacement service. It should be obvious that the decorating bill in a low-rent four-room apartment will be far less than it would be for the same number of rooms in a New York Park Avenue or a Chicago Gold Coast or a San Francisco Nob Hill apartment hotel.

Only by experience and many years of research and contact with properties *by direct management*, or much study of actual cases, can the appraiser properly determine the correct amounts to use in his estimates. Even though an appraiser believes a property to have had intelligent management, even though he has the operating statements over a period of years, he must analyze these statements carefully before constructing his own operating statement.

Some owners, as a result of income taxes, endeavor to assign as much of their replacement cost as possible to repairs and mainte-

nance in order to reduce their income taxes. It is wise to consult an income tax adviser.

An interesting problem in connection with any property arises when there has been or is pending a change in the neighborhood. Every appraiser knows of deluxe apartments which, because of a neighborhood trend to a lower income occupancy or the infiltration in inharmonious racial or income groups, have had to be satisfied with a lower rental income. There may even be an in-between period when a deluxe apartment, once renting for $300 per month, now rents for $150 per month, still occupied as a family unit, but which in a decade hence may be rented as a rooming house for $75 to $100 per month.

With this change in the neighborhood resulting in lower rents, intelligent management can no longer justify what were once normal expenditures for maintenance and repairs. The owner, the appraiser, the manager must realize that a change in circumstances require a reduction in operating costs.

The appraiser certainly cannot then follow past operating statements of the property in setting up his own present average normal operating cost. It is almost as though a new property has come into being. The fine old deluxe apartment has been succeeded 20 years later by a middle-aged, well-built but rather medium grade building. "The king is dead, long live the king" might well be said under such circumstances. The first experiences no longer apply. Comparable experience of similar middle-aged buildings must be used, to be succeeded a decade or two later by even different ones based on the experience of rooming house properties.

The type of occupancy in properties must be considered. A close-in apartment hotel with single-room apartments will have one set of operating experiences. Five-room family apartments farther out bring into action an entirely different set of factors, use or even abuse resulting in an entirely different, possibly higher maintenance and replacement cost.

Even in the same general class of property, items are often not comparable. An apartment hotel having mostly one room and bath units shows a much higher plumbing maintenance and repair item in its operating statement than an apartment house having a large number of four- and five-room family units.

For the small structure the appraiser does not have to go into great detail in setting up his operating statement. For a huge office building or apartment building, however, the working operating statement might be far more accurate and with a detailed breakdown.

One recommended breakdown which is quite typical, is as follows:

MAINTENANCE

A. BUILDING
  a. General
    (1) Structural
      (a) Exterior painting and cleaning
      (b) Roof, roof fixtures, and drainage
      (c) Carpenter work except on finish
      (d) Mason work
      (e) Awnings, screens
      (f) Miscellaneous
    (2) Equipment
      (a) Heating and ventilating system
      (b) Plumbing
      (c) Electric system
      (d) Elevators
      (e) Refrigeration
      (f) Gas stoves and piping
      (g) Other equipment
  b. Alterations (tenant changes)
    (1) Structural
    (2) Mechanical

B. DECORATION AND FLOORS
  a. General public space

b. Tenant space
(1) Decoration
(2) Floors
(3) Shades

C. FURNITURE AND FURNISHINGS
a. General public space (separate only when extensive)
b. Tenant space
(1) Carpets and rugs
(2) Furniture repairs and renovation
(3) Drapes and curtains
(4) Linens
(5) China, glassware, and silver (replacements)

REPLACEMENTS

A. BUILDING
a. Structural
b. Equipment
(Subdivide as under *Maintenance*)

B. FURNITURE AND FURNISHINGS
a. General
b. Tenant space

This schedule is basically applicable to apartment houses but can be modified with little difficulty to other buildings and structures.

EXAMPLES FROM REAL LIFE

Here are some actual cases. Taxes, management, and insurance are not covered, as the concern of this article is maintenance and replacement only.

The following are total figures on expenses for each year on a 28-year-old lower priced (sold for $9,250 in Nov. 1947) single-family three-bedroom stucco dwelling in a white-collar worker neighborhood. Taxes are not included (about $120 a year) nor are depreciation or interest, but insurance is included, as are all repairs and improvements.

CASE I

1930	$205.00	1938	55.00
1931	290.00	1939	130.00
1932	152.00	1940	120.00
1933	120.00	1941	188.00
1934	205.00	1942	70.00
1935-1936—The property was occupied by the owner.		1943	25.00
		1944	47.00
		1945	390.00
1937	128.50		

This gives a total of $2,125 for the 14 years the property was occupied as a rental property, which is an average expense of $151.82 per year. It is quite evident that if an appraiser had used an average of the five years prior to 1945, he would have been grievously mistaken in setting up his appraisal from an income standpoint. It is apparent that there occurred during these five prior years a building up of accrued maintenance that was not being taken care of. So in 1945 the owner had to spend a substantial sum for maintenance and replacement. Inspection plus operating statements plus analytical judgment are all necessary if an appraiser is to arrive at an accurate figure in using average operating costs in setting up his appraisal figures.

Following are the exact figures on a three-bedroom, one bathroom, seven-room house in a good middle class neighborhood, $75 rental (sold for $12,000, Nov. 1945). The rental was frozen a bit low in early 1943. The house was about 20 years old and is of average construction. Tenant occupancy for the past half dozen years or so had been of very good quality and the house has had no unusual abuse, simply normal wear and tear and the usual effects from the elements.

It readily can be seen from the foregoing figures that the appraiser must make some breakdown of the heavy expenditures in 1945 and average them in order to build up a proper operating statement for the future. The following are the figures the appraiser finally used: taxes, $265 (increased tax rate); insurance, $30 (increase in amount of insurance carried); repairs, $100 (this is an average and is low today in view of rising costs); decorating and painting, $115 (this is less than the average for the 9 years as

CASE II

Year	*Taxes*	*Insurance*	*Repairs*	*Decorating*	*Miscellaneous*
1937	$249.87	$2.88	$22.88	$15.00	$5.18
1938	266.45	2.88	163.93	161.60	52.02
1939	264.18	45.04	129.45	20.00	56.75
1940	263.20	2.52	340.73*	12.00	3.46
1941	233.76	16.25	70.48	27.00	13.10
1942	234.29	49.50	3.00	34.94	4.00
1943	225.11	5.33	14.60	8.00	39.95
1944	224.84	6.75	24.61	110.00	2.44
1945	224.77	80.50	127.23	798.05†	10.05

* Includes new roof at $314.

† Includes redashing stucco at $250 and exterior wood painting at $156 and interior painting and papering at $343.10.

$250 of 1945 is for redashing stucco); miscellaneous, $20 (this is an average).

Following are four years of experience with a 13-apartment brick building, in a good neighborhood, about 25 years old.

None of the figures below contains any allowance for exterior painting. The appraiser should remember that fuel costs are increasing, wages are increasing and that in averaging out materials and supplies those costs are rising, too.

It is obvious that the decorating cost was entirely out of line in 1945. The rental situation happened to be very tight that year and this particular landlord refused to do any decorating—a false economy as well as an improper tenant relationship which will result in vacancies when the rental situation is not so tight. In the first year, the "other expenses" included a new stoker and submerged hot water heater. These "other expenses" in each year included the management commission.

CASE III

	1939	*1940*	*1941*	*1945*
Income	$5,661.58	$5,804.55	$5,721.88	$5,900.00
Fuel and ashes	827.88	826.38	673.51	919.75
Utilities	321.99	309.75	286.38	314.32
Payroll	672.69	672.69	600.00	848.00
Material and supplies	80.23	56.79	57.93	66.59
Interior painting	554.22	571.14	474.15	86.20
Other repairs	793.22	580.68	392.31	518.28
Taxes	1,093.57	1,092.13	1,092.54	1,171.21*
Insurance	281.77		48.35	63.28
Other expenses (New—stoker and submerged hot water heater)	746.26	488.62	339.67	332.95

* 1945 taxes paid in 1946.

The following is a 28-apartment, three-story brick apartment building, 25 years old, in a close-in neighborhood, a very well-built building, in good condition and well maintained.

The figures do not include exterior painting. The "other expense" figures include the management fee. This is a building which, because it has been intelligently

CASE IV

	1939	*1940*	*1941*	*1942*	*1951*
Income	$10,226.15	$10,230.50	$11,174.84	$11,394.07	$15,807.62
Fuel and ashes	711.98	813.74	807.62	897.29	1,347.44
Utilities	760.40	859.73	764.77	721.72	774.83
Payroll	814.77	756.54	796.65	1,003.47	1,212.84
Material and Supplies	185.46	124.71	116.66	84.28	—
Interior painting	503.45	846.06	947.00	514.90	925.64
Other repairs	389.56	341.13	396.02	311.43	779.87
Taxes	1,943.14	1,847.59	1,947.31	2,244.98	—
Insurance (not all included)	—	7.50	—	19.89	—
Other expense	1,475.50	1,646.83	1,703.95	1,611.02	4,281.02

managed, would be very helpful in providing averages that could be used for comparison purposes. However, there have been no major repairs such as new roof or new boiler, and the appraiser will need to supplement the expenses by an addition for replacement for this and other structural or equipment requirements. The high 1951 figure on "other expense" shows this and indicates the need of investigation by the appraiser. A check on this item shows that $2,450 was spent for new refrigerators, leaving the true figure for 1951 at $1,831. In 1950 "other expense" came to $1,168.

From 1944 to date, improvements have been made continually and the rent control office approved modest rent increases in addition to the usual flat increase permitted by Congressional action.

The 1951 expense figures startlingly point out the cost problem of inflation. Averages used in earlier years are of little value in today's appraisal work. Even an average based on the last ten years would be faulty. *The appraiser needs the help of the Certified Property Manager* in properly determining and setting up expense accounts in his appraisal reports today.

SUMMING UP

Briefly summarizing this discussion of maintenance and replacement cost, it is apparent that an appraiser must use considerable judgment in determining what are proper allowances for these two categories. He can only determine them through experience and careful comparison with similar properties. He should consult freely with and use the assistance of the property manager. With such experience, comparison and assistance he can analyze each property that comes to him for appraisal and set up his own carefully determined ideas in a proper operating schedule.

In doing all this he must be careful to weigh and analyze averages. Averages are fine if the appraiser is quite certain that the underlying facts are the same. If not the same, he must know wherein the differences lie. He must have the ability to determine how such differences will affect his averages.

As the appraiser proceeds to his final valuation figure, he must remember that past maintenance and replacement policies, whether under niggardly, intelligent or lavish management, affect both the condition and life of the physical structure, the size of both the gross and net future income stream and the comparison sales price approach to the property. Only considerable experience and study, conscientious factual survey and good judgment on the appraiser's part can help him to determine the true valuation of the property.

MAINTENANCE EXCHANGE

by David L. Keith, CPM, Editor

LETTERS OF INQUIRY, COMMENTS BY READERS, NOTES BY THE EDITOR

Chemical grass trimmers

Life for the maintenance man is peculiarly complicated. Manufacturers spend years (as do we) developing better lawns by fertilizers, by soil conditioners, etc., and then they proceed to develop a chemical to keep us from having to cut it. Hi Ho—here we go again.

No one needs to tell the janitor that it isn't running the lawn mower that's the tiresome or time-consuming job. It's the getting down on the hunkers and trimming around each tree, close to the building, along the walks, ad nauseam.

For those buildings where the time element is a problem, these new chemicals cut down clipping to once or twice a season. If applied as a strip to reduce hand trimming, rather than to the lawn as a whole, they're surprisingly inexpensive—$1.00 for from 500 to 800 feet of strip and from $2.00 to $2.25 for from 1250 to 2000 feet of strip.

Those we will try this season are "Kem-Kut" made by The Loamium Company of America, Harrison, N.J., and "Stop-Grass" made by Science Products Company, 1230 East 63rd Street, Chicago 37, Illinois. Here's hoping!

Modern furniture construction

For those CPMs who maintain their own furniture repair and upholstering shops, or are considering doing so, two new books will be found most helpful. They are available from the Book Find Club, 215 Fourth Avenue, New York 3, at $6 each. The first, "How to Build Modern Furniture—Vol. 1, Practical Construction Methods," gives plans as well as construction methods, while volumn 2, "Designs and Assembly," is largely devoted to actual designs, although some information on wood-working tools and wood finishes is included.

Maintenance of heating equipment

Now that summer's here, the above titled IREM F & S Bulletin makes good reading. Did you notice, too, the index of *all* the Bulletins to date on the back page?

Concrete hardening agents-seasonal application

Dustiness of concrete floors is probably not too interesting to many buildings except where tenants use the area. Of course some buildings use paint, but many others find paint will peel and become a terrific nuisance—worse than the dust.

There are a number of hardening agents for concrete, some of which are far more practical than paint in some installations. Some, such as Lapidolith, made by L. Sonneborn Sons, Inc., N. Y., claim deep penetration and increase in hardening as much as ten times. While we have not torn up a floor to see how deep these agents *have* penetrated, experience shows that they are often very effective.

Strangely enough, winter is often the best time for such application, which is the reason for mentioning this problem now. The humidity in the basement gets pretty high in the summer and rain penetrates deep into the soil and can provide water pressure from underneath the slab. In winter, in many parts of the country, frozen soil prevents further moisture absorption and the dry air ouside plus the boilers inside provide a dry floor and atmosphere.

The above, of course, holds true for the application of any surfacing to concrete basement floors. Each geographical region has its best time for this specialized type of maintenance.

Pigeons-wow!

An item in *American Builder* mentioned Ye Ed as a source of information on pigeons. A symposium of all past items was the result, as below. (I sincerely hope pigeons will fall heir to the fate of the passenger pigeon and that all building owners in the future will hire CPMs who have read this item.)

The first problem to consider in ridding yourselves of either pigeons or starlings is the law in your community. Some cities have special laws against the destroying of these birds. Our first caution, therefore, must be not to do anything which is against the law.

Many devices have been tried to scare away starlings and pigeons; among them noise, electric lights, owls, etc. There is no question that scaring methods produce immediate results but within a short time the birds get used to the scare tactics.

Powdered sulphur has also been used, sprinkled along the edges of buildings where pigeons congregate. Unfortunately, however, the sulphur blows and streaks in the rain and must be replaced constantly. Other means of making perches uncomfortable are spikes, nails and broken glass. Because these are relatively expensive and are a hazard to tenants or workmen, they are not generally recommended.

To keep pigeons away from a particular building, without reducing the pigeon population (if that is against the law) one-half inch mesh chicken wire can be used to screen off the resting places of the birds. This is very effective. However installation costs may be quite expensive.

Poison grain, if allowed, can be used in windproof hoppers. The poisoned grain should be alternated with unpoisoned grain, the poison being used one out of seven days. During the other six days, the liquid which is used to hold the poison to the grain should be used to coat the grain. Thus the birds will get used to the unpoisoned grain and will have no method of determining in advance whether poison is being used on a particular day. Here it is a problem of keeping poisoned pigeons or starlings from becoming obvious in your neighborhood—and again, there is the law.

The best method of eliminating these birds is by the use of wire live traps. This is the same type of trap that is used by bird banders. Plans for making them may be obtained from your State or the U. S. Department of Agriculture. If it is at all possible, the trap should hold one or two live birds in it at all times. Bird will get wise to the trap after a while and it should be put away for one or two weeks, while bread crumbs, grain, etc., are sprinkled around the area to accustom them to use this as a feeding area as well as a resting place. Then when you put out the trap again, you will catch some more.

You may find exterminating companies in your city that specialize in getting rid of pigeons. One such is Twin City Pigeon Eliminating Company of St. Paul, Minn. In any case, your effort should be done quietly, without publicity or fanfare.

New Certifications

INSTITUTE OF REAL ESTATE MANAGEMENT

The title of "Certified Property Manager" has been conferred upon the following individuals by the Institute of Real Estate Management.

R. EDMUND HERZIG
524 B Street
San Diego, California

Born, Bowman, North Dakota, August 25, 1913; property manager associated with O. W. Cotton Co.; formerly for five years was engaged in developing, designing and financing income properties; also served as loan appraiser for FHA; received A.B. degree from San Diego State College; completed management course given by IREM San Diego Chapter and took graduate work in business administration at University of California; professional territory covers metropolitan San Diego, Chula Vista, National City, Oceanside, Coronado, Escondido, Lemon Grove and Encanto, California.

KING E. PARKER, JR.
1126 South Main Street
Walnut Creek, California

Born, San Francisco, California, May 19, 1917; has been engaged in real estate brokerage, financing and management of retail business properties for five years; recently accepted the position of executive vice president of the Contra Costa Real Estate Board of which he formerly had been a director; he is a past national director of the U. S. Junior Chamber of Commerce, and a neighborhood commissioner of Boy Scouts of America; professional territory covers central and eastern Contra Costa County in California.

ALONZO F. GREEN
119.East University Avenue
Gainesville, Florida

Born, Jasper, Florida, September 30, 1918; president of McKinney-Green, Inc., Gainesville, and St. Johns Apartments, Inc., Jacksonville; has managed the Green-Mar garden apartments built in 1948 and the St. Johns Apartments built in 1951 since their construction; also has had eight years' experience in brokerage and financing; received B.S.B.A. degree from the University of Florida; holds an active membership in the Gainesville Board of Realtors; is finance chairman of the Alachua district of Boy Scouts of America; professional territory covers Gainesville and Jacksonville, Florida.

ROBERT L. HOPE, JR.
644 Central Avenue
St. Petersburg, Florida

Born, St. Petersburg, Florida, January 12, 1926; vice president of Thorn & Hope, Inc.; has had five years' experience in managing commercial-store buildings, hotels, apartment properties and residences as well as in real estate sales and leasing; attended St. Petersburg Junior College and University of Florida receiving a B.S. degree in business administration; holds an associate membership in the St. Petersburg Board of Realtors; also a member of executive council of St. Petersburg's Polio Chapter, a vice president of the Citizen's Safety Council and a past director of the Junior Chamber of Commerce; professional territory covers St. Petersburg, Florida, and St. Petersburg's Gulf Beaches.

WALTER G. ASHMORE
555 First Street
Macon, Georgia

Born, Batesburg, South Carolina, May 19, 1919; was decorated four times while serving in the Infantry during World War II and upon release from the Army in 1945 he joined the Dessau Realty & Insurance Company as secretary of the firm; manages principally residential properties and has been active in real estate sales, appraising and insurance; he is a past president of the Macon Board of Realtors, a past director of the Georgia Association of Real Estate Boards, a past director of the Junior Chamber of Commerce and a major in the Georgia National Guard; professional territory covers Macon, Georgia, and surrounding territory.

FLEW MURPHEY
488 Cherry Street
Macon, Georgia

Born, Gainesville, Georgia, August 9, 1914; vice president of Murphey, Taylor & Ellis, Inc. with which he has been associated since 1938; besides extensive management of commercial and residential properties he engages in brokerage, real estate insurance and construction; attended Mercer and Emory Universities in Georgia, receiving an A.B.

degree in economics and business administration; completed management course given by IREM in Birmingham (1946); he is president of the Macon Board of Realtors, chairman of United World Federalists; also member of Rotary Club; professional territory covers the city of Macon and Bibb County in Georgia.

PAUL R. LILLY, JR.
120 West Central Avenue
Valdosta, Georgia

Born, Valdosta, Georgia, July 18, 1925; president of The Lilly Company, Inc. established in 1951; entered the real estate business in 1947 and has been engaged in management of office buildings, apartments and residential properties, brokerage, leasing, appraising, mortgage lending and insurance; he is a director of the Georgia Association of Real Estate Boards and for the past three years has served as secretary-treasurer of the Valdosta Real Estate Board; he is a past commander of his American Legion post and a former director and vice president of the Lions Club; professional territory covers south Georgia.

JOHN A. HUNT
20 East Washington Street
Belleville, Illinois

Born, St. Louis, Missouri, July 11, 1900; operated a general real estate and insurance business for four years and in 1951 became associated with Schmale Realty Co.; he is president of the Belleville Board of Realtors and Lions Club, a vice president of the Belleville Insurance Board; member, Bell-Scott Committee and Belleclaire Home Owners; professional territory covers the Greater Belleville, Illinois, area.

LEONARD H. SCANE
222 East Delaware Place
Chicago, Illinois

Born, Chicago, Illinois, September 9, 1902; has been engaged in the real estate field for thirty years and in 1952 opened a management and brokerage business under his own name; formerly for twenty years was associated with Baird & Warner, Inc., Chicago, where he headed a management department and was purchasing director; he has written numerous articles for real estate trade magazines; is chairman of the real estate department of Roosevelt College in Chicago and lecturers on real estate principles, brokerage and property management; was representative of NAREB before U.S. Senate and House of Representative Committees; was one of the founders and has served as a director of the Apartment Building Owners & Managers Assoc.; he is a past president of the Ely Chapter of Lambda Alpha and the Digest Club of Chicago and has served on the executive and apartment committees of the Natl. Assoc. of Building Owners & Managers; professional territory covers metropolitan Chicago.

DONALD R. HUEBER
144 North Delaware Street
Indianapolis, Indiana

Born, Indianapolis, Indiana, September 13, 1927; vice president and treasurer of A. J. Hueber & Company, Inc. and treasurer of A. J. Hueber Savings & Loan Assoc.; engages in management of all types of properties, appraising, mortgage lending and brokerage; completed management course given by IREM in St. Louis (1952); he is chairman of the property management division of the Indianapolis Real Estate Board; vice president, Chapter 79, Savings & Loan Institute; member, Optimist Club and Junior Chamber of Commerce; professional territory covers Marion County, Indiana.

JOHN H. BEERS
8237 Georgia Avenue
Silver Spring, Maryland

Born, Sparks, Maryland, June 16, 1915; partner of Beers Brothers Realty Company in charge of property management; operates single-family residences, apartments, and commercial property; other experience includes sales supervision, appraising and loan negotiations; received an A.B. degree from University of Maryland; took AIREA course, Appraisal I, and completed management course given by IREM in Washington, D.C. (1951); holds membership in the Montgomery County Real Estate Board; also a member of Exchange Club in Silver Spring, and the Junior Chamber of Commerce, American Legion and Retired Officers Association of Washington, D.C.; professional territory covers District of Columbia and Montgomery County, Maryland.

CHARLES F. BLEVINS
19 Garden Street
Cambridge, Massachusetts

Born, Falmouth, Massachusetts, July 14, 1921; manager of Waterhouse Trust Co.; specializes in management of residential six-story apartment buildings; completed management course given by IREM in Cambridge (1949); holds membership in the Boston Real Estate Board; secretary-treasurer of Middlesex Apartment Owners Association; professional territory covers Cambridge, Massachusetts.

HAROLD E. WALDRON
645 Hancock Street
Quincy, Massachusetts

Born, Cortland, New York, April 27, 1892; has had twenty-six years of experience in the real estate field; opened his own firm in 1938; specializes in management of residential apartments; appraises for HOLC, FHA, banks and individual clients; also handles residential rentals, sales and financing; has taught appraising at Boston University Extension for several years; he is a director of NAREB; past president, Massachusetts Real Estate Assoc.; trustee, Mass. Board of Real Estate Appraisers; serves on the legislative committee of the C. of C. and on the Building Code Committee of the City of Quincy; member, Quincy and South Shore Board of Realtors and Society of Residential Appraisers; professional territory covers Greater Boston area.

LOUIS L. PIENTA
1432 Dime Building
Detroit, Michigan

Born, Grand Rapids, Michigan, August 21, 1889, recently joined John A. Pack Corp. as property manager; formerly for seven years handled real estate sales and property management for H. G. Woodruff, Inc.; his twenty-five years of activity in the real estate field has also included extensive appraisal work; member, Society of Residential Appraisers and the Detroit Real Estate Board; professional territory covers State of Michigan.

MAURICE H. SOBELL, JR.
3415 Cadillac Tower
Detroit, Michigan

Born, Edinborough, Scotland, March 29, 1922; associated with Schostak Management Company as manager of both commercial and residential buildings; received B.A. degree from Duke University; holds membership in the Detroit Real Estate Board; professional territory covers metropolitan Detroit.

JOHN H. PERL
813 Chestnut Street
St. Louis, Missouri

Born, St. Louis, Missouri, February 3, 1915; has engaged in property management for fifteen years and in 1948 became associated with Giraldin Bros. Real Estate Co. where he operates apartment, office and commercial buildings, lofts, residences and tenement properties; completed management course by IREM in St. Louis (1952); holds membership in Baden School Patrons Association and St. Louis Real Estate Board; professional territory covers the City of St. Louis and surrounding suburbs.

JULES O. HENDRICKS
918 City National Bank Building
Omaha, Nebraska

Born, Park County, Wyoming, June 4, 1921; he is a member of Phi Beta Kappa graduating with honors from Indiana University and received a Master's Degree in public administration from Wayne University in 1949 when he joined Carl C. Wilson, Inc. to operate the apartment buildings under their management; he is a member of the legislative and taxation committees of the Omaha Real Estate Board; chairman of the Central YMCA adult education committee; serves as water commissioner for the City of Bellevue, Nebraska, and is a member of the City Council; professional territory covers eastern Nebraska.

ALVIN W. JOHNSON
918 City National Bank Building
Omaha, Nebraska

Born, Omaha, Nebraska, December 5, 1920; associated with Carl C. Wilson, Inc. as manager of residences and garden-type apartment buildings; received a B.S. degree from Northwestern University in 1947 after three year's service in World War II; holds salesman membership in the Omaha Real Estate Board and is a director and chairman of the adult program committee of the YMCA; a past director of Junior Chamber of Commerce; member of Exchange Club of Omaha and Master Mason; professional territory covers Omaha, Nebraska.

DAVID KRUGMAN
1330 Main Avenue
Clifton, New Jersey

Born, Zabludowa, Poland, September 4, 1905; has been engaged in the real estate profession for twenty-seven years and operated his own office until 1950 when he became a senior partner in the firm of Krugman & DePetro; his experience includes real estate sales, developing and building residential and industrial property, and ten years of appraisal work in addition to management of residences and apartment buildings; he is treasurer of the Passaic County Board of Realtors; president, Passaic County Multiple System; member, American Institute of Management, Society of Residential Appraisers and many civic and social organizations; several of his articles on real estate subjects have been published in trade magazines; professional territory covers northern New Jersey.

JOHN W. BOERS
612 West Fifth Street
Cincinnati, Ohio

Born, Belleview, Kentucky, January 26, 1905; since 1949 has been associated with Walter H. Tarr & Son as maintenance supervisor and formerly held this position for twenty-one years in Thos. Emery Sons, Inc.; has had twenty-one years of experience in management of tenements, stores, apartment, office and loft buildings; received a B.S. in commerce and certificate in real estate from University of Cincinnati Evening College where he attended in 1934 through a scholarship offered by the Cincinnati Real Estate Board for outstanding grades; attended Maintenance School sponsored by IREM in Chicago (1951); holds membership in Cincinnati Real Estate Board; professional territory covers the Greater Cincinnati, Ohio, area.

LEEMON W. NIX
1754 Utica Square
Tulsa, Oklahoma

Born, Charleston, Arkansas, August 28, 1909; owner of Apartments Management Co., he constructs, operates and manages rental housing units, principally garden type apartments; has engaged in real estate brokerage and building for the past twenty years with the exception of four years' service in World War II; has also done appraisal work both on consulting and fee basis; attended Univ. of Tulsa and Univ. of Arkansas receiving a B.S. degree in business administration; completed management course given by IREM in St. Louis (1952); is an associate member of the Tulsa Real Estate Board; former national director of Natl. Assoc. of Home Builders; housing committee member of Tulsa C. of C.; professional territory covers Tulsa, Oklahoma.

PAUL H. RITTLE
812 East Street
Pittsburgh, Pennsylvania

Born, Pittsburgh, Pennsylvania, September 3, 1916; since 1946 has been a partner of the Rittle-Rosfeld Co., a real estate firm engaging in management, sales, financing and general insurance; has specialized in management of apartments, residences and small commercial buildings during his fourteen years in the real estate field; holds an active membership in the Pittsburgh Real Estate Board; member, East North Side Business Mens' Assoc.; professional territory covers North Side and North Boroughs of Pittsburgh, Pennsylvania.

JOHN S. PALMER
158 Madison Avenue
Memphis, Tennessee

Born, Memphis, Tennessee, February 2, 1920; operates a general real estate business with his brother, under the firm name, Palmer Brothers; for the past eight years has managed principally investments and apartment buildings; experience also includes real estate appraising and financing; member, Real Estate Board of Memphis, Insurors of Memphis, and American Legion; professional territory covers Shelby County, Tennessee.

C. GORDON JACKSON, JR.
4505 North Central Expressway
Dallas, Texas

Born, Dallas, Texas, May 4, 1927; property manager, Gordon Jackson Realty Co.; specializes in management of single-family residences and duplexes; attended University of Texas and Southern Methodist University, receiving a B.A. degree in business administration; completed management course given by IREM in Dallas (1950); member of the Dallas Real Estate Board; is active in the civic work of the Junior C. of C. and serves as chairman of several committees; professional territory covers the City of Dallas and suburbs.

C. RICHARD WHITNEY
49 King Street, East
Kitchener, Ontario, Canada

Born, Toronto, Canada, September 18, 1921; in 1946 entered his father's real estate office, George Whitney Limited, where he holds title of vice president; experienced in real estate brokerage, appraising and management of single- and multiple-family residences; is active in the alumni work for the University of Western Ontario where he received a B.A. degree; completed management course given by IREM in Buffalo (1947); secretary of Kitchener-Waterloo & District Real Estate Board and director of the Ontario Assoc. of Real Estate Boards (1952); director of Navy League and Naval Officer's Assoc. of Canada; professional territory covers Ontario, Canada.

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